



*presented by G. Ferguson
to J. Brown 16th Sept. 1841*

A C C O U N T
OF THE
VARIOUS SYSTEMS

John Brown
M E D I C I N E,

FROM THE DAYS OF HIPOCRATES,

TO THE PRESENT TIME:

COLLECTED FROM THE BEST

LATIN, FRENCH AND ENGLISH AUTHORS,

PARTICULARLY

From the WORKS of JOHN BROWN, M.D.
LECTURER ON MEDICINE, AND PRESIDENT OF THE ROYAL MEDICAL
SOCIETY, IN EDINBURGH, &c.

By FRANCIS CARTER, M.D.

VOL. I.

L O N D O N:
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P R E F A C E.

THE nature of this work, it is presumed, will be a just apology for adding to the number of Medical books, being to lay before the English reader, an account of the various and principal theories of Medicine, collected from the best LATIN, FRENCH and ENGLISH Authors.

The very important doctrines lately published, being what in a great measure excited to the undertaking, further support such an opinion; for, the English reader to be deprived of such knowledge would certainly be a great misfortune.

—The work alluded to, is that of DOCTOR BROWN, first published in I. VOL. Octavo, in 1780. A second Edition of which appeared in 1784, in II. VOLS. both Editions in LATIN; intituled ELEMENTA MEDICINAE.—

This learned Author has taken a most

extensive view of the medical art, enriched it with one great, and several subordinate propositions, which have intirely overturned the doctrine of the Schools ; reduced all diseases to two forms only, viz. one originating from too great an application of the exciting powers, the other arising from a deficient application of the same, which he has done with a degree of judgment, and force of reasoning, that has hitherto proved unanswerable.

Amongst the details of different theories, that of spasm has not been given.

This doctrine first advanced by HOFFMAN, and lately extended to the explanation of so many of the phænomena of diseases, is so extensively applied in DOCTOR CULLEN'S FIRST LINES of the Practice of Physic, to which the reader is referred, as to render an abridgement incompatible with this work, and is so fully confuted in the account of the new system in the same, as to obviate the necessity of such a detail.

The

The account given of DOCTOR BROWN's propositions, in this undertaking, and the doctrines naturally arising therefrom, are so full, as may it is hoped, enable not only the medical world to comprehend with clearness the new principles of Medicine, but also others, who wish to know the conditions on which they depend, and point out the proper mode of treating diseases, as founded on the same; The great utility of which, the compiler of this work, during several years extensive practice, particularly in diseases which owe their existence to weakness, has most evidently experienced; and accounting for the phænomena of life, health, and disease, on principles, which like a superior power, overturn every false system, and establish Medicine on the most solid basis.

The difficulty found in giving the sense of DOCTOR BROWN's system, has been considerable, arising from the nature of the doctrine, and other evident causes connected


nected therewith. Should therefore the language appear stiff or not run so smooth as that of former systems, it is hoped, it will be apologized for.

How far the compiler may have succeeded in his undertaking, must be left to the candor of the judicious, one thing he can faithfully say,

Quæ potuit fecit.

LONDON,
JUNE 7, 1788 }

FRANCIS CARTER.

 The use of the asterisks found interspersed in this undertaking, will appear in a future publication.

T H E
V A R I O U S S Y S T E M S
O F
M E D I C I N E.

THE first medical author of note was Hippocrates ; he was born about 400 years before Christ, and was the first systematic writer ; he gained a very high reputation chiefly by his exact observations of the most minute circumstances of diseases, and the care with which he gives the detail of what preceded them ; the symptoms with which they were attended ; what afforded relief ; and what exasperated the disorder. His aphorisms, which are made up of physical and practical axioms, were long held incontestible. He excelled in prognostics, diagnostics, and a knowledge of symptoms. The doctrine of Hippocrates is so much interwoven with some of the Systems hereafter to be related, as to render a further account of it unnecessary

here ; and the defects and errors contained in it, are so occasionally treated of in some of the same as they may have appeared to the author of each, as to render an account of them here equally so, and more particularly, as under whatever form or appearance they may be found, or whatever errors they have been brought to support, which appear to be many, the whole, it is presumed, will be found perfectly confuted when we come to explain the *Brunonian Doctrine*, and to relate the System of a great *Medical Author*, whose works will be long had in remembrance, and whose discoveries are the happiness of the present age.

Asclepiades, of Laodicea, was at the head of a sect who called in question the Hippocratic doctrine ; neglected experience, and supposed the force of reason alone sufficient to establish the principles of medicine ; they consider nothing but the proximate causes of diseases, which they reduce to three, the relaxation of the solids, their density, and a mixed state, consequently

frequently they admit but three general indications, from which they never swerve in practice; to relax the dense parts, to brace the relaxed parts, and in the mixed state, to combine one with the other. This simple and abridged mode of practising medicine, caused those physicians to be known by the name of Methodists.

They thought themselves therefore not obliged to study slavishly the motions of nature, agreeable to Hippocrates. This doctrine entirely mechanic, and within the reach of every capacity, had already eclipsed that of Hippocrates, when Galen revenged the insult they had offered. He confounded the detractors; but at the same time established a dogmatic system, founded on the four elements, the four temperaments, and the four fluids; a system which he derived from Aristotle's philosophy, and which he wrapped up in the darkness of his dialect. The blood, the bile, the pituitous humour, and the melancholy, were regarded as the sources of

all disorders. The blood, as being hot and moist, he referred to the air, the bile, as hot and dry, had its reference to [fire, the pituitous humour, as cold and moist, represented the water, and the melancholy, as dry and cold, represented the earth; from thence they distinguished four kinds of tumours, which they referred to each of these fluids, viz. The phlegmon to the blood, the erysipelas to the bile, the œdema to the pituitous humour, and the scirrhus to the melancholy. Again, they attributed the different sorts of fevers to these same fluids. They imagined the blood to produce the simple synochus, and the putrid synocha; the bile, the tertian fever double and simple, the pituitous humour, the quotidian, continued and remittent fevers, and the melancholy the quartan, quintan, and sextan fevers, &c. The chief view they had in practice, was to correct by contraries, the temperatures caused by the prædominant fluids, viz. to correct heat by cold, and cold by heat, the dry by the moist, and the moist by the dry;

dry ; and whenever any substance in the animal œconomy produced effects, which had no reference to any sensible qualities they knew of in the fluids, or in the remedies, they were called by them occult.

This system supported itself a long time by means of the philosophy of Aristotle, which alone was adopted in all the schools ; people endeavouring frequently (but in vain) to bring it into disrepute. But at length, a more enterprising and successful genius overturned it in the 17th century ; when Van-Helmont found out the existence of a vital principle, on which depends the functions of the animal œconomy, both in the sound and morbid state : he found out the references, and connexions of the stomach and præcordial parts, with all the other parts of the body : he distinguished the affinity, which external bodies have with our organs, and which produce such different effects in every individual. In fine, he found out the influence of the physic on the moral, and of the moral on the
physic ;

physic; yet he concealed these truths under a mask, the most extravagant a disordered imagination could ever invent. He supposed in man a Being endowed with understanding, which he called *Arche*, to which he attributed the privilege of being the cause of life, death, disorders, health, motion, and sensation. He placed this *Arche* in the pylorus, from which he supposed that its orders and power extended themselves over all the other parts of the body, by means of this agent. According to him, the *Arche* was susceptible of different passions, as fear, terrour, anger, &c. according as it was affected by external bodies with which it had connexion; in a word, all the motions of the body were effects reflected from sensation, and sometimes the effects of the caprice, or bad humour of this spiritual being. The practice of this author was as extraordinary as his theory; he believed nothing of the coction of febrile matter in acute disorders; he paid no regard to crisis, except when caused by sweating.

“Sweating,

“ Sweating, says he, is the road nature
“ takes to drive off all sorts of fevers ;
“ consequently a physician ought to pro-
“ mote it, by giving nothing but sudori-
“ fics ; we ought not to wait for, or de-
“ fire a natural crisis, but endeavour to
“ prevent nature in this point : for, con-
“ tinues he, a man is not worthy to merit
“ the name of a physician, if he knows
“ not how to cure a fever in four days
“ time.”

Such ideas could not long prevail ; they were soon effaced by the discovery of the circulation of the blood. When it was known that this fluid, passing from the heart, was carried by the arteries to all parts of the body, and that from thence it returned to the heart through the veins.

The living system was considered as an hydraulic machine ; the good state, and conservation of which, depended on the liberty these fluids had to pass through all the tubes which composed it : The principle of life and health being thus established,
the

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the loss of the equilibrium, between the solids and fluids, and a disordered circulation, were looked upon as the chief causes of diseases; their attention was fixed on the too lax, or too rigid fibres; or on the contracted or too relaxed vessels; or the fluids being too thick or too thin; in a word, they considered no longer the body to be any thing but a real statica hydraulic machine, provided with all mechanical instruments, which included pullies, levers, pumps, suckers, bellows, strainers, &c.

By this system so simple, they thought themselves in a condition to lay the foundation of an everlasting theory, and invulnerable practice.

“ The mechanic physicians,’ says an
“ author “ flatter themselves that they
“ know and understand the circulation and
“ its laws; they know that disorders de-
“ pend on a plethora of the parts and their
“ practice tends to diminish this plethora
“ by evacuations; they are always certain,
“ that evacuations made before the ple-
“ thora is formed, would have prevented
“ it

“ it. These physicians have also other re-
 “ sources and props for their doctrine ;
 “ they associate themselves with those
 “ who have thoroughly studied all the
 “ delusions of the density of fluids ; with
 “ those who know their different flex-
 “ ions ; and in fine they associate them-
 “ selve with the Chymists, who, by their
 “ analyses and decompositions, make evi-
 “ dent to the touch and sight the different
 “ salts wanting, or too abundant in the
 “ blood ; as well as the means of destroy-
 “ ing or recovering the same if difficient,
 “ consequently they see (to be sure) the
 “ blood composed of a certain number of
 “ globules, to decompound itself and en-
 “ ter into the least vessels, to be obstruct-
 “ ed, and by being pressed together to be-
 “ come dense. When acids are redundant
 “ in the stomach or in the blood, they are
 “ sure to blunt or destroy them by exhi-
 “ biting a contrary salt. In fine, drink,
 “ say they to their patients, such a quan-
 “ tity of water to wash your blood and to
 “ retard its motion, diminish its volume,
 “ and relax the vessels ; take this potion

“ to clean your stomach and intestines,
 “ which are so full of filth ; leave off that
 “ diet which produces such a thick and
 “ viscous chyle, &c. These are the pre-
 “ cepts you must submit yourselves to, to
 “ avoid plethora, and hinder the density
 “ of the fluids : with these rules, and this
 “ way of living, you will necessarily en-
 “ joy a good state of health.”

Such is the System which rendered
 Boerhaave so famous, by the alluring man-
 ner in which he explained his principles ;*
 but scarce had this doctrine been univer-
 sally

* He was, says an eminent author, a man of gene-
 ral erudition ; and, in applying to medicine, he had
 carefully studied the auxiliary branches of anatomy,
 chemistry, and botany, so that he excelled in each. In
 forming a System of Physic, he seems to have studied
 diligently all the several writings of both ancient and
 modern Physicians, and without prejudice in favour of
 any former Systems, he endeavoured to be a candid and
 genuine eclectic. Possessed of an excellent systematic
 genius, he gave a System superior to any that had ever
 before appeared. As in the great extent, and seemingly
 perfect consistency, of System, he appeared to comprove
 and refine upon every thing that had been offered be-

sally received, before the weakness perceived in the relations of the principal phænomena of the animal œconomy with

B 2 hydraulic

fore ; and as in his lectures he explained his doctrines with great clearness and elegance ; he soon acquired a very high reputation, and his System was more generally received than any had been since the time of Galen. Dr. Boerhave's treatise of the diseases of the simple solid, has the appearance of being very clear and consistent, and was certainly considered by him as a fundamental doctrine ; but, in my apprehension, it is neither correct nor extensively applicable. Not to mention the useless, and perhaps erroneous, notions of the composition of earth and gluten ; nor his mistake respecting the structure of compound membranes ; nor his inattention to the state of the cellular texture ; all of those circumstances which render his doctrine imperfect : I shall insist only upon the whole being very little applicable to the explaining the phænomena of health or sickness.

The laxity or rigidity of the simple solid does, indeed, take place at the different periods of life, and may perhaps, upon other occasions, occur as the cause of disease : but I presume that the state of the simple solid is, upon few occasions, either changeable or actually changed ; and that, in ninety-nine cases of an hundred, the phænomena attributed to such a change, do truly depend on the state of the living ^{solid} ; a circumstance which Doctor Boerhaave has hardly taken notice of in any part of his works. The learned Doctor Gaubius, and many others, have sufficiently pointed

hydraulic, and mechanical laws, brought over some physicians of Montpellier, to the opinion of Van Helmont and Stahl, who admitted a principle of life and action,

out the defects and imperfections of Boerhaave on this subject

After Doctor Boerhaave has considered the diseases of the solid, he in the next place attempts to explain the more simple diseases of the fluids, and there indeed he delivers a more correct doctrine of acid and alkali than had been given before: but, after all, he has done it very imperfectly. We have indeed since his time, acquired more knowledge upon the subject of digestion; and so much as to know, that a great deal more is yet necessary to enable us to understand in what manner the animal fluids are formed from the aliments taken in. And although Dr. Boerhaave has fallen into no considerable error with respect to morbid acidity in the stomach, he could not possibly be complete upon that subject; and his notion of the effects of acidity in the mass of blood, seems to have been intirely mistaken; and is, indeed, not consistent with what he himself has delivered elsewhere. His doctrine of alkali is somewhat better founded, but is probably carried too far; and the state of alkalescency and putrefaction, as well as all the other changes which can take place in the condition of animal fluids, are particulars yet involved in great obscurity, and are therefore still subjects of dispute.

tion, independent of those laws ; but in shunning the extravagance of these philosophers, they referred this principle to the sensibility, viz. they regarded the nerves as the principles of all motion, and of a sort of sensation necessary for all the actions of life. They looked upon the sensibility as derived from certain sources of the body, and that these parts were in a continual counterbalance in health, and that a derangement of such was the principal cause of disease.

It is about 42 years since M. Bordeau begun to spread his ideas in Paris, which he

There is another particular, in which Boerhaave's doctrine concerning fluids appears to me unsatisfactory; that is in his doctrine de Glutinoso Spontaneo. The causes which he has assigned for it are by no means probable, and the existence of it seldom to be proved. Some of the proofs adduced for the existence of the phlegma calidum, are manifestly founded on a mistake, with respect to what has been called the inflammatory crust, (See Van Swieten's Commentary, page 96 ; and the many examples given by Boerhaave of a glutinosum appearing in the human body (Aph. 75) are all of them nothing more than instances of collections or concretions, found out of the course of the circulation,

he had drained from Montpellier; he has unfolded them since, in the different works he has published. He regards the cellular tissue as one of the principal sources of action in the human frame. The innumerable vessels, the nerves, and the membranous couches, which are lost in the cellular substance, render it eminently moveable and sensible, proper for the extraordinary dilations and contractions with which it is continually agitated.— This motion, joined to the tenacity of the cellular tissue, opposes an agreeable, equal, and gradual resistance to the force of the vessels and nerves, which are as it were limited by or lost in it; and it seems that the cellular organ is sufficiently moveable and capable of resistance, and sufficiently elastic for to return the degrees of force, which it receives with more or less increase or diminution, according to circumstances. This elasticity, and these motions of the cellular organ, joined to those of the skin, and of all the fibrous and vascular system, preserves and establishes (in part) the tonic motion.

Mr.

Mr. Bordeau, adds that independant of the action of the nerves vessels and mucle^s the diaphragm keeps up a perpetual and peculiar motion by its connexions and adherences. He does not confine the principle of motion to the cellular tissue and the diaphragm ; he finds it again in the stomach and Intestines. See Mr. Roberts on Bordeau's Works for ~~an~~^{an} extension of this doctrine.

While this System was attempted to be cleared up at Paris, M. de Haller made experiments in Germany, relative to sensibility and irritability. These experiments, tried on living animals, convinced him that certain parts of our body, which were thought to possess an exquisite sensibility, were absolutely insensible ; that irritability was independent of the nerves, and that there were no irritable parts, except those which had in their composition muscular fibres.

The experimental road Haller had taken, seemed to put his opinion beyond all suspicion of error. " But this road,
" (though

“ (though the surest) says M. de Buffon, is
 “ not so nevertheless, except inasmuch as it
 “ is well directed, if it be ever so little in-
 “ direct ; we arrive at barren countries
 “ where we see but very obscurely some scat-
 “ tered objects ; yet we are forced to gather
 “ them together, by supposing reciprocal
 “ relations, and common properties ; and
 “ as we pass and repass with pleasure on
 “ the crooked paths we have made, the
 “ road seems open, and tho’ it is termi-
 “ nated by nothing, all the world follows
 “ it, we adopt the method, and admit the
 “ consequences as principles.”—We leave
 the reader to judge if these reflections are
 in any degree justified with regard to
 Haller.

We cannot doubt but that the living
 animal contains a principle of life and
 motion : But this principle is not a spiri-
 tual or a metaphysical being ; it is the
 irritability or the property which the
 animal fibre has of contracting itself when
 it is irritated. The mechanism of this
 contraction is covered with a veil, which
 cannot

cannot be penetrated by the lights of the human understanding. The faculties of the soul, and the material agents, are the causes; and although, in a natural state, each of these causes has a distinct and separate empire over the irritable parts, they may nevertheless have an indistinct influence over all the motions of the machine in a preternatural state.

It is probable that the irritability has its principle in the medullary juice, which is secreted in the brain, and which is distributed in the inward tissue of all parts by the nerves; we may presume that the mechanism of this distribution depends on the motion of respiration and the action of the heart; whence there results an alternate pressure, exercised by the blood in the veins and arteries, on the brain. This being supposed, the circulation of the blood, the action of the lungs, and the motion of the brain, are therefore the three principal sources of life; so that any one of these cannot cease to act, without destroying the animal.

Another phænomenon, which we know not how to explain, and yet it is not the less proved by observation, is the difference of connexions, or of the relations which the different passions of the soul and the divers sorts of material stimulants have with the irritable parts; a sensation which excites motions and contrary sensations in different persons. E. G. a substance shall affect violently the stomach without producing any sensible affect on the pituitary membrane, or on the conjunctiva; another which irritates the kidneys, or the bladder, in one subject, and which affects the lungs or the stomach in another, &c.

All that can be said of these phænomena is, that the nerves have different modifications, not only in all the irritable parts of the same individual, but again, in all individuals in general; whence we conceive the difference of temperaments, and of tastes; the different effects and causes of disorders, and the different manner in which remedies act.

The

The particular laws of the circulation of the fluids in the capillary vessels, and in the cellular tissue, are another fundamental principle of the Physic of the human body. The discovery of the circulation of the blood, which was thought to be the most important object of the animal œconomy, was, notwithstanding, a source of errors in the theory and practice of the art; because they considered the arteries and veins as forming a continued circle, through which the fluids must necessarily pass without any obstruction or retrogradation; because they knew not that between the extremities of the arteries, and veins, there were other vessels, and a peculiar organ, through which the fluids might flow and reflow, might carry themselves into all the parts of the body, without passing by the heart; and because they did not conceive that these fluids might follow all directions possible through irritation alone, which attracts or repulses them, according to their different modifications.

There is a relation of motion and sensation established between all the parts of the body by means of the sympathetic nerves; now as these nerves form many plexus, or centres of re-union on the præcordial parts, on the stomach, on the intestines, on the womb, &c. it is not extraordinary that the inward affections, the vivid motions, delightful mirth, sudden shocks, pains, sickness, fainting, all the strong impressions of agreeable or disagreeable sensations, correspond to these parts; nor that their extraordinary motions, excited by mechanical causes which irritate them, are communicated to all the other parts of the body.

Such are therefore the references which they have observed between the præcordial parts, the stomach, the intestines, and all the other parts of the body; they have reciprocal relations, not only by means of the nerves, which excite motions and sensations, which correspond to each other; but also, by the interposition of the cellular tissue and capillary vessels, in
which

which the fluids flow and reflow, according as they are determined towards a part, or as they are the reverse; but it is always an affection of the mind, or a material agent, which produces these different phænomena, by exciting the irritability and sensibility of the parts on which these causes operate. Every organ, when it exercises its functions, is a centre, towards which the fluids are determined by the action of the nerves; in chewing, the blood is carried with a greater abundance, by means of the capillary vessels, towards the salival glands, to furnish a greater quantity of spittle; when the stomach digests, its irritability being excited, encreases the heat in the region it occupies, and the fluids, which flow thither, furnish the different juices necessary for digestion. During menstruation, the action of the womb attracts the blood, which passes by excretion; during pregnancy, the fluids are equally abundant, for the same reason, in this organ, to furnish fluids for the growth of the fœtus, and its dependencies; but in all these cases

cases, I repeat it, it is always a stimulant principle which excites the irritability of the organ, in exercising its functions, and not the balance or the action and re-action of the cellular tissue of the diaphragm, and of the intestines of the lower belly, as many suppose. The affections of the mind, and the material stimulants which excite the irritability and sensibility of our organs in a sound state, become sometimes the causes of disorders (E. G.) whenever they have or acquire such modifications as excite extraordinary motions and sensations, which derange the functions, and produce disorders.

The causes, which they call Humoral, are those that affect us ofteneft; they have two principal sources; besides those which may come from without, there are others that arise in the body, sometimes in the paths of circulation, where they are retained, and sometimes out of those paths, into which they enter afterwards; but let their origin be what it will, we may look in vain to find out their character. The

Acute disorders depend generally on these causes : The violent irritation they excite in the organs of circulation hastens the course of the fluids, and produces fever ; and if the morbid cause be settled in any part, that part becomes a centre of action, towards which the fluids are determined by the same irritation ; hence arise infarction, inflammation, supuration, gangrene, &c.

In these disorders the Heterogeneous fluid is destroyed or dissipated by the progress alone of the extraordinary motion it excites, (*i. e.*) the disorder even becomes the cause or the instrument of the cure, without any help of the art, except in its moderating this motion, if it is too violent, or in augmenting, it when too weak and feeble. Thus fever, after a certain number of fits or exacerbations, changes the character of this fluid by a sort of coction, which renders it fit to be evacuated by such or such an excretory organ in a limited time ; and if it be fixed and settled in a part, the inflammation,
even

even which it excites, destroys the pernicious quality by the suppuration which it excites. Such is the path of nature by which Hippocrates governed his practice in acute fevers. In all ages there were some physicians, whom a long experience induced to bring back the vain dogmatick systems which they drained from the schools, to which alone they applied, as being the fathers of medicine, being professed observers of the operations of nature.

They were called observators or expectators : this is the manner in which M. Bordeau, paints them ; “ The physicians, who followed nature as their
 “ guide, content themselves with the exact
 “ history of each disorder, they follow and
 “ observe the path without pretending to
 “ disturb it when it runs through its
 “ periods and its degrees with precision ;
 “ they content themselves with endeavour-
 “ ing to bring it back to its natural path,
 “ when it seems to deviate from it. Thus
 “ they stick to the history of life and its
 phenomena

“ phænomena to the history of tem-
“ peraments and revolutions peculiar to
“ divers ages, and to the two sexes, with-
“ out running back to the elementary
“ principles of bodies, without trying to
“ penetrate into this inward structure,
“ without comparing the laws which the
“ human body follows in its functions,
“ with the general laws of motion, and
“ with those of mechanics.

“ This System has for its fundamental
“ principle a real fact very comfortable
“ to the patients and very advantageous
“ also for the physicians; it is beyond
“ doubt that of ten diseases, there are at
“ least two thirds which are cured of
“ themselves and enter by their natural
“ progress into the class of simple incom-
“ modities, which are used and are scat-
“ tered up and down by the motions of
“ life.

“ Medicine considered under this point
“ of view may be compared to astronomy;
“ whatever be the causes that make the

“ stars move, an astronomer observes,
 “ calculates and follows exactly the course
 “ of their motions, foretells and fixes the
 “ time of eclipses ; in the same manner
 “ an observing physician applies himself
 “ to nothing but to foresee and follow
 “ the different phases of diseases ; he con-
 “ fines himself in fixing the happy or un-
 “ happy termination, without troubling
 “ himself about what the subtile phyc
 “ of the human body teaches, or pretends
 “ to teach, on the disposition of humours,
 “ on that of the small vessels ; the different
 “ modifications of chyle, blood, bile, or
 “ Lymph, &c.

“ Such was once, one of the most im-
 “ portant parts of Hippocrates’ system, and
 “ of the ancient observators, whose foot-
 “ steps he trod in, chiefly confining him-
 “ self to paint the phænomena of health,
 “ diseases and their different degrees ;
 “ these observators made so many pic-
 “ tures after nature, in describing the diffe-
 “ rent states of health, and the phænomena
 “ of diseases, whence immediately arose
 “ the

“ the famous doctrine, or lucky and un-
 “ lucky, critic and noncritic days, as also
 “ the tenets of coctions and final evacuati-
 “ ons or crisis.

“ This manner of describing and fol-
 “ lowing disorders, gave rise again to ir-
 “ resistible truths, for which the different
 “ ages have had more or less respect, and
 “ which the famous detractors of this
 “ doctrine were never able to destroy,
 “ who have often renewed their attacks,
 “ such as Asclepiades, Paracelsus, Van
 “ Helmont, and certain moderns, who
 “ were chiefly those who have been at-
 “ tached, without reserve, to the mecha-
 “ nical systems.

“ It was not possible to cultivate this
 “ contemplative System, but by letting
 “ the disorders run on of themselves,
 “ without attempting to disturb them by
 “ remedies ; thus the physicians of this
 “ sect had nothing so much at heart, as
 “ not to derange nature in its operations ;
 “ it gives and directs the diseases, it ex-

“ cites divers accidents to rid itself of
 “ them, being the principal cause to ef-
 “ fect the coction, and determine the
 “ crisis or evacuations : These are the
 “ principal axioms of the Expectators.

“ Asclepiades called this Physic of Ex-
 “ pectation, and Meditation on Death,
 “ which was often repeated, and is now
 “ daily, without affronting the Expectant
 “ Physicians ; they think that they ought
 “ not to renounce their principle for a
 “ joke, which disturbs nobody but light-
 “ and frivolous people, they may retaliate
 “ upon physicians who do not think as
 “ they do, and who seem to throw doubts
 “ upon their irresistible doctrine, as, ac-
 “ cording to the laws on which it is esta-
 “ blished, they may say that it is better
 “ to meditate on the death of patients at-
 “ tacked with a desperate disorder, than
 “ to make a disorder mortal, which would
 “ have been cured of itself, if people had
 “ not the madness to derange it, by incon-
 “ siderate manœuvres and by the hazard-
 “ ous application of an hundred remedies
 “ applied

“ applied on imaginary indications, and
“ adopted on vain and childish evidences.
“ But it is very certain that this method
“ of expectation has something very weak
“ and supercilious in it, which does not
“ well agree with the vivacity of patients
“ and assistants ; besides the Expectators
“ have always been but few in number,
“ when compared to the rest of physicians,
“ especially among people naturally lively,
“ impatient and fearful ; they love to be
“ the physicians of people who think,
“ who have gravity, patience, and good
“ sense ; they do not attempt to deceive
“ patients by the shew of theory, and
“ importune them by the use of a thou-
“ sand drugs, more bitter often than the
“ symptoms of the disorder ; they are also
“ sensibly affected to see that the little
“ pains, the superfluous aids, the quan-
“ tity of medicine, drinks, and many
“ other things which people make bad
“ use of, often cause the loss of patients,
“ which Nature, left to herself, would
“ have saved.

“ In

“ In fine, another distinguishing cha-
 “ racter of observing physicians, is the
 “ mildness with which they pay attention,
 “ as much as lies in their power, to the ap-
 “ petite, temperaments, and habits of pa-
 “ tients. This doctrine seems in this case
 “ very attractive; independent of the small
 “ number of remedies which we must
 “ make use of according to those laws;
 “ they elude the excessive rules of diet,
 “ which has made so many martyrs. As
 “ soon as a patient asks for something to
 “ eat, a physician who observes nature,
 “ does not refuse them, being certain that
 “ it is instinct and not gluttony, or some
 “ false appetite that speaks; thus Hippo-
 “ crates sometimes thickened barley cream
 “ with which he nourished his patients;
 “ Thus certain whole nations do not re-
 “ fuse patients, in the strongest disorders,
 “ even eggs, pottage, animal food, wine,
 “ &c. whereas the dogmatic physicians
 “ are a kind of tyrants by the rigorous
 “ and misunderstood diet, which they
 “ prescribe.”

The opinion of M. le Cat, concerning the fluid he calls caustic, and which may be also called the stimulant fluid, humoral principle, or heterogeneous fluid, which he supposes is the material agent of the irritability of our organs in a sound state, and which becomes, on being differently modified, the innate cause of Chronic Diseases, which affect the human frame from infancy to the very end of life; that opinion I say, threw a deal of light upon the history of disorders.

This fluid, the principles of which are transmitted from the father and mother to the child, may retain its noxious qualities from this same source even, and produce, in the different periods of life, the same disorders, to which the parents were subject; but besides this original defect, this same principle may change it's qualities by the sole progress of motion, or by foreign causes, and produce a disease peculiar to the individual.

All men therefore are born with a principle which may be the cause of an infinity of disorders, the same ought to be said in reality of the stimulant fluids, which become excrementitious, by the action of the solids ; so that if this fluid is driven out in proportion as it is vitiated, the health is not altered ; but if it be retained, it will produce various disorders, according to the character it has acquired, or qualities communicated to it, and according to it's particular affinity to such or such a part ; we may presume also that the climate, manner of living, the affections of the mind, and chiefly the changes of the fluids peculiar to each age, and to each individual, gives to the fluid we are speaking of different qualities, which constitute the different temperaments, and from whence arise the disorders peculiar to children, to manhood, old age, and to different nations. The humoral principle when become heterogeneous is therefore that leaven ; this morbid humour, that affects our system and deranges the functions of the animal œconomy in so many different

different manners. Sometimes this principle has no fixed focus, it is carried sometimes one way sometimes another; from whence arise disagreeable sensations, indetermined incommodities, vague pains, and symptoms, which are sometimes violent, but do not continue, but often vanish at the moment they disturb the most: at other times the same principle fixes on one particular part, and exercises such ravages as it is capable of; now in this case the life of the patient is more or less in danger; according as the part affected is more or less essential to life. Must an external ulcer also are a fistula to be regarded as a favour from nature, in cases where the morbid principle should threaten the head, lungs, liver, stomach, kidneys, bladder, &c? and how many patients would not be subject to the apoplexy, suffocating catarrh, asthma, nephretic, cholic, &c. if they were subject to the gout?

Hippocrates said that those who are subject to the hæmorrhoidal flux are out of danger of being troubled with a pain

in the side, inflammation of the lungs, and that sort of eating ulcer called phagedenic, that they are not exposed to tumors, nor tubercles, which from the resemblance they bear to parched peas, are called thermenthes; that they are not attacked with herpes, * with leprosy, or such kind of disorders; that notwithstanding if the hæmorrhoidal flux be stopped unseasonably
these

* From *ἐρπω* to spread or creep. These disorders are apt to creep on and spread about in the skin. Dr. Cullen places this genus of disease, in the class locales, and order dialyses. These ulcers in the skin, are divided by some into five species.

1st. The simple. These consist of single pustules, of a yellowish white colour, and sharp pointed: they are inflamed about their basis, and are naturally dry; these burn, itch, and smart a day or two, and then disappear.

2d. The tetter, ring-worm, or serpigo. These are the same in appearance as the first, only that they run in heaps; they more difficultly pass away; for they contain more corrosive matter; their smarting and itching is more violent; they eat sometimes through the skin, and spread considerably; they neither form matter nor come to digestion.

3d. and 4th. Shingles, or zona aurea, &c. Dr. Cullen makes this *i. e.* Herpes zoster, synonymous with

these different disorders will soon after appear again; and that the same may be said of certain fistulous ulcers in the fundament, which prevent those disorders the cure of which may cause them to arise;

his Erysipelas phlyctænodes. It is sometimes accompanied with inflammation and fever. This kind appears in large clusters on the neck, breast, loins, hips, or thighs; the heads are white and watery, and are succeeded by a small round scab, resembling millet seed, whence the name herpes miliaris; and now the disorder is still more grievous. In these cases the ill-habit of body being first attended to, it must be remembered that the external applications must be mild. Internally the treatment may be as in the erysipelas.

The chief indication is to take off the irritability of the system; which is best done by a proper use of the cort. Peruv. The prognostic of death from its surrounding the body is false. These two kinds were called by the ancients *vermis repens*, *vermis formica miliaris*: Celsus calls them *ignis sacer*; and Wiseman calls them *ambulativa*.

5th. Herpes-exedens, also called *nome*, *noli me tangere* *ulcus depascens*, *herpes depascens*; and Celsus calls *ignis sacer*. According to Dr. Cullen it is of the species of inflammation, which he calls erythematous. It resembles an ulcerous erysipelas; its humour is the most corrosive of any of the species: it corrodes down the

arise; phenomena of this sort are daily observed. (a case) A man after the suppression of an hæmorrhoidal flux was attacked with so violent a cholic that a
volvulus

fleshy parts, and separates it into scales: when it disappears, it leaves hard tumors behind it, on the parts that were ulcerated.

Mr. Bell, in his Treatise on Ulcers, places the tinea and the *herpes*, as varieties in his species of ulcer, which he denominates cutaneous. He further observes that the cutaneous ulcer may, in all its varieties, be included in the four following; viz. 1. The *herpes farinosus*, which includes what some call the dry tetter. 2. *Herpes pustulosus*, which includes the crusta lactea, and the tinea capitis. 3. *Herpes miliaris*; of this variety is the ulcerous eruption called the ring-worm. 4. *Herpes excedens*; this includes the ulcers called depascent, and phagedenic.

The *Herpes farinosus* is the most simple kind. It appears on any part of the body; most frequently on the face, neck, arms, or wrists; it comes out in broadish spots, which consist of very small red pimples; these are attended with a troublesome itching; they soon fall off in the form of a white powder, which resembles fine bran; they leave the skin perfectly sound, but are apt to return in the form of a red efflorescence, fall off, and renew as before.

volvulus was much dreaded ; having removed the disease, the breast was harrassed, and pus spit up, the hæmorrhoidal flux was again brought on, and the patient cured.

Another man had a long time a trifling running of puriform matter from the rectum, the suppression of which brought on an inflammation of the lower belly, which terminated in a deposition of puriform matter in the side of the anus. These observations prove manifestly that a morbid principle lodg'd about the rectum, whether it produces an hæmorrhoidal periodic

The *herpes pustulosus* occurs most frequently in children ; generally attacks the face, and behind the ears ; often other parts of the head also, but rarely elsewhere. It appears in the form of pustules, which are originally separate and distinct, but afterwards run together in clusters. At first they seem to contain nothing but a thin watery scum, which afterwards turns yellow, and exuding over the whole surface of the part affected, at last dries into a thick crust or scab ; when this falls off, the skin below frequently appears entire, with only a slight degree of redness on the surface ; but on some occasions, when the matter hath probably been more acrid, upon the scab falling off, the skin is found gently excoriated. vid. Achores.

odic flux or a simple flow of purulent matter, may remove to another part, and produce disorders more or less severe, according to the parts on which it falls. In the same manner it is observed, that the hypochondriac affection, the mania, the epilepsy, and many other disorders, disappear by re-establishing either the return of an hæmorrhoidal flux, or a flowing of purulent matter by the fundament.

Chronic disorders present daily such examples of a metastases of the heterogeneous principle, which is carried indiscriminately from the head to the feet, and vice versa, from the right side to the left, or from

The *herpes miliaris* generally appears in clusters, though sometimes in distant circles of very minute pimples.

These are at first perfectly separate, and contain only a clear lymph, which, in the course of the disease, is excreted upon the surface, and there forms into small distinct scales; these at last fall off, and leave a considerable degree of inflammation below, that still continue to exude fresh matter, which likewise forms into cakes, and so falls off. The itching in this sort of ulcer, is always very troublesome, and the matter

from the left to the right, from the interior to the exterior, or the reverse. These metastases follow no other laws but those of irritation, which attract or repulse the humours, by producing changes in the oscillations of the capillary vessels, or of the cellular tissue. The most part of the disorders, of which we are speaking, have intermissions, paroxysms, and periodical returns, which prove that their cause is dissipated, and that they are successively re-produced, whenever in reality the humoral principle is contaminated to

discharged from the pimples is so tough and viscid, that every thing applied to the part adheres so as to occasion much trouble and uneasiness to the patient on its being removed. The whole body is subject to this disorder, but it most frequently appears on the loins, breast, perinæum, scrotum, and groins.

The *herpes exedens* discovers itself on any part of the body, but mostly about the loins, where it sometimes spreads to such a degree as to extend quite round the waist. At first it usually appears in the form of several small ulcerations, collected into large spots of different sizes, and of various figures, which are always more or less of an erysipelatous, like inflammation. These ulcerations discharge large quantities of a thin, sharp, serous matter, which sometimes forms into small

a certain degree, in which case it irritates violently the part it affects; but the motion it excites dissipates it, E. G, fever removes the cause, which produced it; this is also evident in acute disorders, and the hypochondriac affection, in the asthma and gout, &c. each paroxysm of which

crusts that in a short time fall off; but most frequently the discharge is so thin and acrid, as to spread along the neighbouring parts, and there to produce the same kind of sores. Though these excoriations or ulcers, do not in general proceed further than the true skin, yet sometimes the discharge is so very penetrating and corrosive, as to destroy the skin, the cellular membrane, and, on some occasions, the muscles themselves.

Dr. George Fordyce speaks of an instance of this disease, under the name of *herpes rapiens*, and says, it arises upon the head in small ulcers, covered with a brown moist crust, and shining, but similar to venereal ulcers, (*which see at the latter end of this work.*)

In the cure of these various cuticular diseases it hath been generally believed to be unsafe, and even dangerous to proceed in any other way, than by correcting the original disorder of the fluids, which was supposed to produce them. It may occasionally happen that some disorder in the general habit is attendant on any of these ulcerous complaints, and that a regard thereto may be required; but in the greatest number of instances, they

which is a depuratory motion, or a critical affection of the diseased organ, by which it throws off the heterogeneous matter, which irritates it ; and this natural effort is

F renewed

are more certainly and more speedily removed by the use of local remedies merely. In many diseases of the skin, antimonials are frequently given with advantage ; but their efficacy seems principally to depend upon their producing a determination to the skin, and keeping up a free discharge of the matter of perspiration ; which from various causes is long retained on the surface of the body, and thereby becomes acrid, and doubtless is a frequent cause of disordered affections in this part.

Accordingly, all such remedies are more or less effectual, as they are more or less powerful in keeping up a free perspiration. This is further evident by observing, that a due use of the warm bath, is as efficacious in these cases, as the use of antimonials, and other medicines, supposed to carry off morbid particles through the skin. In the treatment of every herpetic disorder, the first and principal circumstance to be attended to, is, that not only the parts affected, but even the whole surface of the body, be kept clean and perspirable as possible ; to this end the frequent use of warm bathing, and of frequent gentle frictions, with clean linen cloaths (in the dry sorts of these complaints) are singularly serviceable. In the milder instances, the following externals generally suffice. 1. The aq. calcis si. usually

renewed every time the humoral principle is depraved by the progress of the motion of the solids, or by any other habitual cause.

In fine the chronic diseases which depend on the innate cause we are speaking of

is all that is required in *herpes farinosus*. 2. The solutions of lead in vegetable acid, is also very effectual; the following is a useful general form. R. sac. Saturn. $\frac{1}{2}$ an oz. acet. acerim. 4 oz. aq. font. dist. 2 lb. m. This may be applied in the form of cataplasm, mixed with bread, or by means of soft rags dipped into it, and laid directly on the parts. In some particular, and more inveterate cases, the following is sometimes to be preferred, viz. R. Merc. cor. A. gr. x. aq. font. dist. lb. i. m. This is very efficacious as an embrocation in any of these disorders. In the more obstinate instances of this complaint, the greatest care is required that perspiration is duly supported, viz. warm diluent drinks frequently taken, as well as the use of the warm bath. The ant. crud. ppt. to 2 drachms in the day, if mixt with a little g. guac. is an admirable assistant to the discharge through the skin, and contributes further aid by its efficacy in unloading the bowels. In the more vigorous and plethoric habits, cooling laxatives are peculiarly beneficial; issues are sometimes necessary in the more inveterate sorts of *herpes*. In the *herpes exedens*, a degree of inflammation often attends

of, are dissipated successively in the different periods of life, some continue a long time, others less; sometimes they succeed one another till death, by changing the character alone, and at other times, health is not altered by the heterogeneous principle for a long course of years, but the critical motion, by which it is expelled, whenever it is vitiated, is not less known

F 2

from

that requires attention; here the saturnine applications, above all others, check its progress, and at length totally remove it. But if, as it sometimes happens, the herpetic, ulcer hath made its way into the muscles, the following ointment is preferable to either the saturnine solution, or that of merc. cor. a. The ungt. saturn. of the different dispensatories, is also an useful application in this last mentioned instance. But care must be taken that this ointment is not become rancid. If, notwithstanding the use of the above, the disorder is unconquerable, it may be suspected that a venereal taint, at the same time, subsists in such a patient. A slight herpetic disorder becomes obstinate by being accompanied with the itch: in such cases, attention must be had to such diseases respectively, before those of the herpetic kinds can be removed. In some instances of the *herpes exedens*, the following bolus has been used with considerable advantage; R. merc. calcin. gr. iiss. Philon. Lond. Scruple m. omn. noct. sumend,

from time to time by some slight indisposition, as a fit of a fever attended by sweating, a slight looseness, a cutaneous eruption, a more abundant flow of urine, or saliva, &c. On the other hand we have observed, that the foreign or accidental causes, influence health, not only by altering the humoral principle, or opposing it's exertions, as it happens through the abuse of non naturals, but also by introducing poisonous substances into the system, or noxious miasmas, as it happens through the communication of the venereal virus, through the bite of poisonous animals, &c.

We would take notice that it is a thing of great importance to distinguish these disorders from those which are inherent in the constitution, because in the first case it is mostly in the power of art to cure them, by removing or destroying the causes on which their existence depends.

Whereas, in the second case, such disorders cannot be eradicated, perhaps, thro' the

the

the progress of life; in this case specific remedies would be sought for to no purpose; none can be found, except for those disorders which depend on an acquired or foreign cause.

Mercury is the only remedy whose specific virtue, with regard to the Lues Venerea, is well ascertained; yet this remedy does not operate by thinning the fluids, by opening the vessels, or by destroying obstructions; for if it operated after this mechanical manner, it would be equally specific against most of the other chronic disorders. It does not, therefore, affect the radical cure of the venereal disease in any manner, except in determining an artificial crisis, through which the virus, which cannot be assimilated with our fluids, is expelled; thus, as in an acute disorder, they distinguish three periods, that of irritation, of coction, and of expulsion; so mercury, introduced into the body, excites an extraordinary motion, prepares the humours, which ought to be evacuated, and deter-

mines

mines them towards an excretory organ, which ought to give issue to them in a short time, if properly applied.

We are sensibly affected to see masters of the art give into the narrow views of those who pretend that the more the mercurial globules are divided, the more efficacious they are in destroying the venereal virus, because they suppose them more efficacious to open the obstructed vessels; who think that every evacuation is an obstacle to the cure of the disease, or who believe that the evacuations which they effect by choice are as salutary as those procured by mercury; who kindly indulge their patients in their liberty and taste, and who confound the disappearances of external symptoms with a radical cure. Experience should, in fine, have opened their eyes to such gross mistakes; for it shews daily that many chronic disorders, which we see with wonder suddenly attack strong and vigorous people in the bloom of life; are the result of the venereal disease, which they attacked after
the

the manner I have just described; it is thus that ignorance and quackery endeavour insensibly to waste the human race.

How many patients, who have languished a long time (waiting on death) in whom some peculiar injury has been found, either in the stomach, liver, spleen, or breast, &c. would have been cured if they had undergone the treatment proper for the venereal disease; a disorder which they mistake in their patients, because a few years have elapsed since the primitive symptoms disappeared. When chronic disorders arise from an acquired or accidental cause, their cure depends on the expulsion or removal of this cause; but it is not the same with regard to those whose causes are hereditary; we are not able to drain the source by any evacuation whatever, nor to change the character by alterative remedies.

The chymists are often mistaken in this respect, in thinking to find out sovereign remedies against those disorders,
by

by the analysis of bodies, and by experiments made in the Laboratory. Their pretensions have been hitherto vain and deceitful; nevertheless, the effects of their remedies are sometimes followed by an appearance of success, because they are administered at the end of a paroxysm, or at a time when the progress of life had determined the end of the disorder, by changing the constitution of the fluids. Such occasions as those they have often taken hold of, and thus boasted of the efficacy of their remedies; but such successes do not impose on those that are well versed in the history of diseases.

Those who have referred almost all the chronic disorders to a disease of the stomach and bowels, and who have confined their practice to the evacuation of humours to destroy this pretended disease, found themselves mistaken in this respect. In many of these diseases, the repeated use of purgatives dissipates sometimes accidents which have resisted every other remedy, as in the kings evil; tetters
worms

worms in stubborn ophthalmies, in certain affections of the head, breast, &c. yet this effect of purgatives, does not suppose that the cause of the disease was in the stomach, or in the intestines. In these cases these remedies do not destroy the principle of the disorder, they do not act but by revulsion *i. e.* determining the course of the fluids towards the lower belly, and by this means relieving the parts affected.

Their opinion is also supported on this, that the opening of cadavers, which died of old chronic diseases, present, often, marks of divers disorders in the intestines of the lower belly, such as schirrous tumors hydatides, peculiar dropsies, purulent depositions, &c. The principle of the disease might have produced these disorders, but it perhaps much oftener happens that the too repeated use of emetics, purgatives, aperitives, dissolvents, diuretics, martials, mineral waters, &c. which they prescribe, in order to attenuate and evacuate the humours; it happens,

I say, very often, perhaps, that the too repeated use of these remedies determines consecutively the alteration in these parts, by irritating the intestines so frequently, and by determining the course of the fluids towards the interior parts.

In fine, whatever road they follow in treating disorders inherent in the constitution, we learn by experience that the powers of art are limited to the moderating of accidents, and only palliate the evil 'till the time when the fluids are differently determined by the progress of life; and that all the vain attempts which they make to destroy the principle of the disorder, before the time marked out by nature, may be dangerous.

All our views in this circumstance ought, therefore, to tend only to thwart the danger which may threaten the patient, and render his disorder more supportable in nature. What sagacity is there not necessary to prescribe a regimen and remedies proper for each age, each temperament,
and

and different kinds of disorders? Here it is the rules of art are often failing, because the nerves are not equally modified in all subjects; because the mode of the irritability of each part varies in almost every individual; whence it happens that the effect of remedies deceives sometimes the fairest reasoner, and that we often see the most contradictory means succeed, according to our opinion. Hence Hippocrates teaches that a wise empiricism, founded on the knowledge of temperaments, taste, manner of living, and passions of each patient, is a surer guide in practice.

We now proceed to relate the discoveries of Dr. Brown, in doing of which it is presumed the giving a full translation of his preface becomes very necessary.



T H E
P R E F A C E
T O D O C T O R B R O W N ' s
E L E M E N T S O F M E D I C I N E .

TWENTY years or more, have been spent by the Author of this work, in learning, teaching, and diligently searching into all the parts of medicine. The first five years of which were bestowed in receiving from others, in digesting what he had received, and in believing it, and laying it up as the most precious treasure.

The second five years, in explaining each more clearly, and in cultivating and polishing with more accuracy ; the third, in doubting, because nothing had come to his wish ; in disregarding the opinions both of famous men, and the common people likewise, and in lamenting that the salutiferous art was quite uncertain and incomprehensible ; that so many ages had passed without advantage, without any
light

light of truth, so sweet to the understanding, and that so great, so precious a part of the frail and short mortal life had perished, during the last years alone; just like a traveller in an unknown country, having lost his road and wandering in the shade of night, a very obscure light, and as it were the first dawnings of day, at last shone upon him.

Thirteen years from this, when he was 36 years old, he fell into his first fit of the gout; many years before he had been well, except that a few months before the disorder arrived, he kept himself to a lower diet than usual. In about 40 days the disorder finished its course, nor did it return till six years after, and then also after he had lived a few months more mean than usual. He was strong for his age, and had a good habit, except that defect of the gout, and some little debility brought on by unusual abstinence. The disorder according to the opinion of physicians was said to depend on a plethora, and too great vigour. Vegetable
food

food was ordered, and wine forbidden, which if diligently observed they promised that the disorder would never return, a whole year was spent in this manner, during which four most bitter, most painful, and very long fits happened; and the whole year was divided between lameness and torture, except fourteen days. Whence the reason of so great a disturbance, thought he, if a redundancy of blood, and too great vigour was the cause.

Why, twelve or fifteen years before, when he had more blood, and vigour, the disorder happened not, and that after a great and continued remission from food it at last came on? Why between the first fit and these latter ones, at which time he had recourse to his usual full and rich diet, so great an interval should take place, and that it should so soon return, at two different times, when he changed his food for the worse? All these he considered within himself; at last another greater solution solved this question, What does food, drink, and other sustenances do

do during the first part of life? They give strength, what then? less and less, what at the decline of life? they are so far from strengthening any more, that they manifestly debilitate? Moreover, life at best, often by the interposition of a disorder, is put an end to by the same powers with which it was supported before.

As thus, disorders first, and then death comes on, not through a scarcity but through a redundancy of the necessities of life; yet he found out that debility was the cause of the disease; and he perceived that corroborants and not debilitants were to be applied as remedies.

He thought therefore that this was to be called indirect debility. The method of strengthening answered so well for two years, that at the latter end he underwent but a very slight fit; which was not one fourth part of the four first. But no Physician will deny but that such a disorder which had returned four times in one year, would not have returned oftener
than

than in this proportion, the following years, under this same method of proceeding.

The mild fit was less than the more severe, a one fourth part. Multiplying therefore, twelve by four, and by this computation, the ratio of the alleviated disorder will be as forty-eight to one. As in the first year he eat nothing (*almost*) but vegetables; so, during the latter ones, he eat animal food chiefly, and that even of the most nourishing sort. He chose the best method, he was sparing in plenty.

A young man who lived with him, and who was troubled with a grievous asthma, was cured in the same manner; and he who was daily affected, only felt one fit for the space of two years.

Afterwards, when it was often objected to him that the gout did not consist in debility, because inflammation attended it. Not doubting that this also arose from debility, he made an experiment of the

truth of it. He invited his friends to dinner, drank heartily, and in two hours the use of that foot, which before dinner he could not through pain, touch the ground with, was perfectly restored. Whence he perceived that the inflammation was also asthenic. Afterwards, he found out that the inflammations of the throat were of the same nature, both in the putrid and gangrenous cynanche, in the rheumatalgia, which is falsely called the chronic rheumatism, and in the end of a typhus, which is believed sometimes to affect the brain, provided it does affect it. As the gout affects the alimentary canal, and particularly the stomach, and often creeps on by complaints very like the dyspeptic ones. Desiring to know whether it had any connexion with the former, he perceived that these latter, as well as the former, gave way to stimulant remedies; moreover he afterwards found out that all the spasmodic disorders, arising from thence, all convulsive, almost all puerile diseases, were of the same character.

Disco-

Discovering that the convulsive and spasmodic affections were the same, even in the organ of voluntary motion, he found out also that their nature was the same, but greater in violence ; as he discovered in the spasms and pains of different places of the body extrinsically, as also in the epilepsy itself, and the tetanus, and by this means he saw that a great number of affections, in which, as if they had been inflammatory, the lance was drawn without end, depended on a scarcity of blood, and other causes of debility, and that they were to be cured, not by drawing away blood or other fluids, but by repletion and restitution of strength. At the first beginning, in order to suppress the fits of the gout, being content with wine and such like good drink, he deferred the use of the more powerful remedies, which he has lately tried with wonderful success ; and he has found out his so much wished for, and much despaired of secret, of repelling the fits, and of confirming health at the same time by means of opium, which has

often effected it in himself and others. This is already the third year, and it is almost spent since the time the disorder left him.

Taught by similar examples of cures, he found that fluxes of blood, called hæmorrhages, do not depend on a plethora, and vigour, but on a scarcity of blood and on debility, arising from another place; consequently he has cast them out of the number of phlogistic diseases, amongst which they were placed in the first edition, in order to put them among the asthenic in his second. For he perceived that venæsection, purging, cold, hunger, and those called sedatives were noxious; and that the stimulant method of cure alone was proper; and that wine itself and brandy, which were thought so noxious, were the most powerful in curing such disorders. After finding this out he learned, in cases where others thought there was a redundancy of blood, that there was a deficiency, and that, from a defect of this, and other stimuli, debility was the cause,

and

and stimulants were the remedies, according to the magnitude of the disease. Being by this method of cure enlightened, he found out that the cause and cure of intermitting, as well as continual fevers, was the same. Thus led by the hand of nature, as it were, round the extensive world of asthenic disorders, he perceived that they all depended on the same cause, and were to be cured by the same kind of remedies, viz. stimulants, and that neither the cause nor the cure differed in any thing except magnitude. As to what regards the phlogistic diseases, whose cause nor cure was never known to any one before, he had long understood that inflammation was not the cause but the effect, and that the cause sprung from the diathesis, and not from that even, unless when very vehement.

In fine, he found by experience that the catarrh was not caused by cold, but by heat, contrary to what is thought, and other known stimuli; and is cured by the other debilitating remedies, which
being

being found out led him to consider the catarrhal symptoms in the measles, in which he perceived that, that very great man (Sydenham) who had promoted the cure only of phlogistic diseases, was a stranger to the asthenic ones, and was deceived by the Alexipharmic Physicians. And as those symptoms are the most dangerous part of the disease, therefore the real cure of them must be of great utility to the cure of the whole disorder. Thence it came to pass that the cooling, and antiphlogistic method of cure, after it was once tried, was found to be equally efficacious, as well in the measles, as in the small pox. In phlogistic diseases he has illustrated the cause, amplified the cure, enriched, and explained it, and reduced it to a sure principle.

He has divided all the common disorders into two classes, the phlogistic, or sthenic, and the asthenic or antiphlogistic. He has made and proved the former to consist in a too great, and the latter in a too deficient, excitement. The former are
cured

cured by debilitants, and the latter by stimulants, the noxious powers of both are each others remedies.

And these operate in the same manner as those do, which cause the most perfect health, only that they differ in magnitude.

The same doctrine is extended to plants. He has proposed his principle, which is illustrated and confirmed by all the parts. Thus, therefore, a conjectural art, inconsistent and false in most of its parts, has at length been reduced to a certain science, which may be called that of life.

The end of the Preface.

THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF THE UNIVERSITY OF OXFORD

IN TWO VOLUMES

LONDON

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ACCOUNT OF Dr. BROWN'S

ELEMENTS OF MEDICINE.

MEDICINE (*according to Doctor Brown*) is the science, or knowledge of preserving sound health in animals, and teaches to check the progress of, and cure disease.

In order to constitute sound health, the actions of the body and mind must be pleasant, easy and just.

If any or all the functions be performed with trouble, difficulty, or perturbation, it is a morbid state.

Diseases that affect the whole system, are called common disorders, when limited to some particular part, then they are called *Local*.

A predisposition, or propensity to disease is such a deviation from health, as to verge to disease, and yet preserve the appearance of sound health.

The body of a living man, or of any other living animal, differs only from the same system in its dead state, in possessing a certain capability of being acted on, by certain external powers only, or by some actions peculiar to man, and internal: This property extends not only to animals, but vegetables, which properly they possess in different degrees.

The external powers are *heat*, which is very necessary for supporting life; *air* equally necessary, either, because it communicates heat to the system, or conveys away what is superabundant; this is also otherwise necessary for the system, as it assists perspiration; it being the most proper medium to be applied to the body, on account of its cleanness.

The other powers are meat, drink, the chyle, blood, and the fluids, separated from.

from it; muscular motion, thought, and the affections of the brain. The property on which these powers act, is denominated *Excitability*, or a capability of being acted on by stimulants. The stimulants themselves are called exciting powers. The common effects of these exciting powers are, sense, motion, the exertion of the understanding, or deep thought, and the passions of the mind; and, I say, all the foregoing are the result or consequence of exciting powers and an excitable principle.

As some of these, viz. the external, produce their effects by impulse, evident to our senses, the other, the internal, must produce their effects in the same manner; for, as the effects of both kinds of stimuli are the same, we are to conclude that the causes are also the same, and that the stimuli of air, heat, chyle, blood, &c. must operate as the stimulus of muscular contraction, or the passions of the mind.

The effect of the exciting powers acting on the excitability he calls *excitement*; excitement then arises from the stimulus of

the exciting powers acting on the excitability, if the excitability be great, the stimulus must be small, otherwise the excitement would be dangerous and the reverse. Hence it is that the excitability of children being great, the stimulus must be small; hence also the stimulus should be applied strongly to old age, as then the excitability is decayed or lessened.

The longer the exciting powers have been applied, and the greater, the more the excitability is diminished, and that in proportion to the magnitude and continuance of the stimulus. This is proved by a temperate person converted into a drunkard: In the beginning, he can bear but little stimulus; but by time he can bear a much greater quantity, because, in the beginning, his excitability being high and undiminished, his excitement would be intolerable, if much stimulus was applied to him; but by the continuance of the stimulus, the excitability being worn, he can bear much more stimulus, and that in proportion to the diminution of the
excita-

excitability ; for the excitement is always in a ratio compounded of both, and the less the exciting powers have been applied, the excitability must be proportionably greater.

Therefore, I say, the stimulus should be proportioned to the present habit of the body ; that is, if the excitability be great, the stimulus should be proportioned first in small quantities, and then gradually encreased ; for the constant use of the stimulus lessens the excitability, which is necessary in order to bring the excitability to bear a proper proportion to the stimulus. The only circumstance necessary for health (on the other hand) is, if the excitability be decayed, the stimulus should be encreased to support a sufficient excitement. The highest degree of excitability is certain death, because then it cannot admit any stimulus, and therefore there can be no excitement.

The disparity of these factors, viz. excitability and stimulus, indicates great debility, because both should bear a certain

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tain proportion to each other; to constitute sound health, one of these causes should not be great, and the other small.

A high degree of excitability requires a long application of the stimulus; for the stimulus being long applied, if it be properly proportioned, gradually diminishes the excitability, which in this case is necessary. In youth, the excitability is very great; in old age, it is deficient,---in the first, because little or no stimulus has been applied to the excitability,---in the last, because it has been long continued, and therefore the excitability must be much worn out.

Great excitability indicates weak excitement: in this case both factors are unequal, *i. e.* the excitement is weak; a great excitement indicates moderate excitability, because the stimulus is proportioned to it in that case. The origin of death and disorder is two-fold, *viz.* great excitability and little excitability, because too great excitability does not admit

admit of a stimulus sufficient for life, it is the same with little excitability.

No poison is sedative, as is generally imagined by physicians, all are stimulants in a greater or less degree, neither miasma, contagion, mephitic air, nor depressing passions are sedatives. This proposition may be explained two ways; first supposing all these poisons to be the most violent of stimuli, in that case, they acting on the excitability with the greatest violence, throw the system into indirect debility, and thus bring on death, or secondly, these poisons being considered as stimuli, still but too weak to act sufficiently on the excitability so as to cause such an excitement as is necessary for life. Poisons either do not constitute general *idiopathic* disorders, or if they do, they do it by their stimulating powers, like all other stimuli; that is, they must produce their effects, as other stimuli do.

As all exciting powers constantly stimulate so excitement is ended two ways
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the one is, when the excitability is worn out by the great force of the stimulus, for example, a man killed by too violent labour; in that case the stimulus of muscular motion operating too violently, brings on such a degree of excitement, as is incompatible with life, in which case he is consequently thrown into indirect debility, this when encreased to too great a degree wears out the excitability *i. e.* brings on death.

This end of excitement which arises from the excitability being worn out by too great stimulus, can be either momentary as in sleep or perpetual as in death in the first case the stimulus of muscular motion, or of the ingesta brings on a transient debility which is removed, by the subtraction of the stimulus, viz. by sleep, and by digestion of the aliments. The other case is, when the powers applied operate so violently as to destroy the excitability suddenly, then death is unavoidable.

The stimuli applied are two fold, first, when the stimulus applied, is not very violent but is long continued, then the continuance of the stimulus, tho' moderate brings on in a course of time indirect debility; because the application of the stimulus, for a long time; tho' not violent makes amends for its deficiency in magnitude. This is exemplified by old men; who, tho' not using excessive stimuli through the course of life; at last fall into direct debility, through their long use. The second is a violent stimulus, tho' applied but for a short time, brings on suddenly indirect debility of the greatest degree *i. e.* death, for example, a man thunder-struck dies from the sudden application of the most violently operating power, viz. Electric fire.

The more powerfully the stimuli are applied to the system, the greater will be the indirect debility; because in that case the excitability must be wasted in proportion to the magnitude of the exciting

powers. It is certain that one stimulus is sufficient for bringing on any, even the greatest degree of indirect debility, but the more numerous the powers are, the greater is the degree of debility that thence results.

The nature of indirect debility is such, that powerful stimuli are necessary to bring the system to a state of health, still the stimuli applied in order to bring it back must be inferior to those, that first brought on the debility, for if they were equal to them or superior, it would be either continuing the disorder or encreasing it, therefore a necessity of lessening the stimuli takes place, which must be gradually done, according as the excitability increases, until each arrive at that proportion to each other, which is necessary for health.

The reason why the stimuli are not to be withdrawn, or suddenly lessened, is, because if a very small stimulus was applied, in consequence of the excitability being

being too much diminished from the proceeding stimuli, an excitement necessary for the support of life, would not result from applying the exciting powers in such degree. In case of direct debility the exciting powers must be applied in a low degree and gradually increased until the system arrives by degrees at the proper standard of excitement. This is entirely necessary, because then the excitability of the system is so much increased, that if the exciting powers were applied, in even a moderate degree, the excitement, thence resulting would prove deleterious. But by graduating the application of the exciting powers, and thereby, in a similar proportion lessening the excitability at last, that proportion between both, so necessary for health, will result, *i. e.* proper excitement

When the excitability is highly increased, it is a general law in the system, that the excitement is diminished, in consequence of the diminution of the stimu-

lus, hunger, rest, depressing passions, and the subduction of the other stimuli shew this. viz. that the excitability is encreased, and the excitement proportionably lessened. Cold, or to speak more properly, the diminution of heat, sometimes seems to recover the system; this happens when the excitement is great, from a great stimulus; in that case cold, being a debilitant diminishes the stimulus, and thus lessens the excitement. But the operation of cold, on a system abounding with excitability, proves destructive, because, it encreases more and more, the excitability already too abundant and lessens the little remaining stimulus.

In extreme old age, as well as extreme infancy the stimulus must be applied in very small quantity, but for very opposite reasons; in the first case, because if any considerable stimulus was applied it would utterly destroy the little excitability that remains; in the other case, because

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if a considerable stimulus was thrown into the system the excitement thence resulting would be too great, as the excitability is accumulated.

A great defect of any, or of all the stimuli, brings on death in consequence of an end being put, by that means, to excitement, the want of air is destructive, not only on account of its utility in supporting life, by respiration, but also because it is a necessary medium to be applied to the superficies of the body.

The subduction of other stimuli does not prove so suddenly destructive to the system, as the subduction of air. The symptoms that follow the subduction of proper stimuli are languor, debility, nausea, vomiting, spasm, convulsions, delirium, colliquative sweats, and indirect debility.

When the system is in a state of indirect debility, powers directly debilitating are not to be applied, because the ex-

citement

excitement necessary for life, which has been before lessened by the excitability being highly diminished, would, by the subduction of stimuli, or by the use of directly debilitating powers, be intirely destroyed, therefore the application of highly debilitating the system, in such a case is altogether improper. When in old age, the excitability very much decreases, then the excitement is to be supported by stimulant powers; but however these stimulant powers may be applied, death must at last be the consequence, in as much as, then the highly exciting powers must be applied to sustain the excitement, and as the excitability must be lessened in proportion to the application of such powers, from this it follows, that in extreme old age, the stimuli must be applied in a moderate degree, sufficient only to sustain the excitement, and also with a view of preserving the little remaining portion of excitability in the system.

Thus direct debility is to be cured by the application of a small stimulus in the
beginning

beginning; as otherwise, the excitement would be too great, the excitability being then accumulated; afterwards the stimulus is to be raised proportionally.

From these it follows, that a very small stimulus is to be applied in extreme youth, and in extreme old age. In indirect debility, the stimulus is to be first applied powerfully, and then gradually lessened for reasons before mentioned.

The cure of direct debility is more easy than the cure of the indirect, because, in the former we can continue an excitement necessary for life; by the well regulated application of stimuli, which is in our power: but the cure of the indirect is more difficult, nay, sometimes out of human power; because it is very hard to recover the excitable quality in the system when it is once lessened, and impossible, when totally worn out.

Different animals possess different degrees of excitability; it even varies in the

same animal at different times. This arises from the different degrees of it implanted originally in each animal by the Sovereign Power, and also on the different quantity of stimuli applied to the animal: for, if a great deal of stimuli was applied, the excitability must be proportionably less; consequently, it must vary in the same animal at different times or periods of life.

Of the SEAT of EXCITABILITY.

THE excitability is seated in the nervous system and the muscular fibres. This excitable principle implanted by the creative power, is a property which is the same throughout all those parts; it is indivisible; does not consist of parts, but inheres, as a simple quality inseparable from the muscles and nerves during life. By this quality, and not by the fictitious motion of a nervous fluid, or the vibratory pulses of electricity, sensation and motion

are effected in an instant of time, when this indivisible excitable quality is operated on by exciting powers. A stimulus, applied to a part of the nervous system or muscles, effects in an instant this excitable principle throughout, but does not pass in succession from one part to another.

- However, any of the exciting powers operating on any particular part, affects the whole excitability, but more especially the part to which it is applied; nevertheless, the affection of the system in general, arising from the operation of a stimulus applied to the excitability diffused through the whole body, is by far greater than the affection of the part affected.

The excitement of the part immediately affected, and also of the remainder of the body, can be calculated, and the proportion of such excitement estimated, by comparing the magnitude of the part affected with the magnitude of the remainder of the body. This is proved by the operation of noxious powers on a part

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whence the whole system is affected ; this is also confirmed by salutary applications made to the general system, in disorders, when particular parts only appear to be affected, nevertheless, the part affected is more diseased than any other given equal part of the body. That one part of the system is or may be in a higher ^{or lower} state of excitement than another, appears by the sweat on the forehead in consequence of hard labour, by the inflammation of particular parts, as of the membranes of the head, by obstructed perspiration which may arise from too great a tone of the extreme vessels, ~~or a clammy sweat.~~ Sweat can be obstructed by a phlogistic diatheses or an asthenic. In the first case, the fibre is too dense, and the excitement proportionably great ; in the latter, ^{it takes place} on account of the debility of the heart. As the operation of the exciting powers either proper, too great, or too small, is directed more to one part than another ; so the excitement in that part, must be in the same proportion, and never the reverse. For, as the exciting powers are always the same, and the excitability,

tability, in the part operated on, the same, the excitement must be in the same proportion; the same causes must always produce the same effects; therefore, the excitement is not encreased in the part, by the excitement in the whole system being lessened, or even remaining unaltered; nor is the general excitement encreased, while the excitement of the part is lessened; in this case, there is no difference, but in the magnitude of the excitement in different parts; otherwise the same cause would produce different effects. General diseases have no particular seat in the body; for they are diffused thro' the system, as the excitability which is generalis affected.

A D I G R E S S I O N.

THE system of physic established by *Asclepiades*, was deduced from the then reigning philosophy of *Epicurus*, which supposed that every thing was composed of pores and *Atoms*. He constituted three

species of disorders, the first of laxity, the second of obstruction, the third mixed; the first he supposed may arise from two causes, viz. when the pores were too wide, tho' the atoms were sufficiently large, or when the atoms were too small, tho' the pores were of a proper size. The 2d. class he also divided into two, viz. when the atoms were too large, tho' the pores were of proper dimensions, or the atoms may be of just magnitude, but the pores too small. The third class was compounded of both. From this it appears, that he referred the cause of disorders to the solids, which has been the spring of many errors in physic.

But to return, it was observed, that general diseases have no particular seat in the body, still there is an inequality of excitement, in consequence of the stimulus operating more on one part than on the rest. Nor is one part first affected, and that affection gradually communicated to the whole system, according to the vulgar notion. Because, as soon as the excitability
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is in one part affected, it is throughout instantly affected in a similar manner, on account of its indivisibility. Besides it is impossible to conceive how one spot could be affected only, without a greater portion of the system. As in pleuritis*, it is impossible to think that the breadth of a shilling could suffer only, and that this small part should gradually produce a general affection; also, it can be proved, that every disease, which, according to physicians, from a topical, produces a universal affection, was first a general one, and that the affection of the part was subsequent to the general affection. Every inflammation is then nothing else, than a symptom following a general affection; this is fully confirmed by the general applications which alone are useful in diseases of this kind, as in the cure of pleuritis, &c. which are cured by the antiphlogistic plan. In every general disease, every topical affection, however formidable, is then to be considered as only a part of a general affection, with this difference, that the part is a little more affected than an equal part of the rest of the
body

body. Therefore, in this case, the remedies should be applied to the system in general. The contractile power of muscles is always in proportion to the excitement, this is proved by the phenomena of good and bad health, and by the operation of exciting powers, &c.

Physicians define *Mobility** to be that state of the system, in which there exists the greatest debility, together with a great propensity to motion. Such a state cannot exist; for there can be no facility of motion, without a proportional strength of the moving powers; but this strength is in proportion to the excitement, and debility is a diminished excitement; therefore there cannot be diminished and proper or
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* The diseases in which Mobility has been supposed chiefly to exist, are those commonly denominated Nervous Disorders; and females of delicate systems and strong passions, are generally remarkably affected with such diseases; as also the sedentary or studious, of both sexes.

In females it shews itself by hysteric, spasmodic, and convulsive affections, in paroxysms, called hysteric fits. These are generally preceded by a pain of the forehead,

great excitement in the system at the same time. For, it is repugnant to the laws of nature, that the moving powers should be diminished, and, notwithstanding, perform their motions with greater facility than before. We must then refer all disorders of great mobility, as convulsions, tremors, &c. to debility as a cause, and cure them by proportionably exciting powers. In order to account for this mobility, physicians fancied, that too great a quantity of the nervous fluid rushed into the

temples, or eyes, with an effusion of tears, and a dimness of sight, a dulness of the senses, an universal languor, listlessness, and anxious oppressed breathing, costiveness, and a strong stimulus to urine frequently; and the urine is voided clear as water.

An intense pain of the loins ensues, with violent shiverings, and chilness: the belly is hard and inflated; the navel is drawn inward, so as to leave a considerable cavity; a sensation is perceived, as of a ball arising from the lower belly to the hypochondres, diaphragm, and throat. A tremor and palpitation of the heart quickly succeeds with a hard, unequal, and sometimes intermitting pulse. The extremities grow cold; the fauces are straitened, and the patient seems in danger of being strangled. The face becomes generally pale;

the part; and caused this violent excitement; or they, to mend the matter, said it was the nervous power.* This *mobility* they divided into mobility with plethora, and mobility without it, &c. The truth is, that
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sometimes red and turgid with blood: the voice is lost; and the pulse is now scarcely to be perceived; so great is the stricture of the belly, as not only to prevent the discharge of the flatulences, but the admission of clysters. In some, the head and limbs are convulsed; others lie in a deep sleep, without sense or motion. Some burst into immoderate laughter, and, on recovering their speech, speak deliriously. Some are seized with violent cardialgic pains and enormous vomitings.

The paroxysm for the most part, soon goes off, with eructations, and rumbling in the belly; leaving a languor and heaviness of the whole body. Sometimes it has continued so long, that the patient has been held for dead, and even actually buried. The hysterical and hypochondriacal diseases, have been erroneously confounded; though they have several symptoms in common; the sudden attacks, loss of sense and motion, constant inclination to urine, retraction of the abdominal muscles, intense coldness of the lumbar region, scarce to be abated by the application of warm cloaths; the sensation, as of a ball, arising from the belly, a violent fixed pain confined to a small spot of the head, and the abatement of all the symptoms from the smell of burnt feathers, are distinguishing phenomena of the hysteric passion. The hypochondriacal often changes

the debility is general; but the stimulus is applied more powerfully to the part affected, than to any other part, *E. G.* in hysteria and spasms of the intestinal canal,

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into melancholy, a scurvy, a slow fever, or the morbus niger; the hysteric into epilepsy, a mortal syncope, a furor uterinus, or acute fever; wherever it proves fatal, it is by an epileptic or apoplectic fit, that the patient is carried off. On dissecting those who have died of hypochondriasis, the liver, spleen, and pancreas, are found indurated, scirrhus, or corrupted; in hysteric persons, the uterus and ovaria are chiefly affected; the latter, in particular, are often surprisingly distended.

The true hysteric passion, though violent and alarming, is not very dangerous, unless improperly treated, or when the patient is weak, and a valetudinarian. No disease, however, is more liable to be attended with epileptic symptoms; and, when produced at first, from injuries; in abortion, or in child-birth, it is apt to return, from the slightest cause affecting the nervous system. Often also, the hysterical and hypochondriacal diseases are completed together; and, in this case, prove commonly lasting, and difficult of cure.

For a further account of these disorders, see the method of distinguishing diseases, under the title Common Diagnosis, and the cure of Athenic Diseases, &c. and particularly, the Hysteria, both mild and severe.—The two latter will be found in the second vol. of this work, and the others in this.

the debility prevails all over the frame, but a violent stimulus operates on it, as of air, or crude and indigested victuals. This debility is the consequence of a long relaxation, which is in proportion to the deficiency of excitement; but, as I said before, a facility of motion, without power, commonly called mobility, does not at all exist; for that a moving power should be diminished, and at the same time also perform motions, with more than usual promptitude and ease, is repugnant to the general laws of things.

Consequently, tremor, convulsions, and all such affections, are to be imputed to debility, as a cause, and to be removed by stimulants. Too great stimulants to a part become noxious; but the cause of spasm is not to be admitted of as depending on vigour: this action is a continued one, and deficient rather than a great one; inasmuch as it is a great contraction depending on the local stimulus of distension, or something of that nature; it consists in diminished excitement, is destitute of strength, and

is lastly removed by stimulant remedies, as will be hereafter proved.

It is to be remarked that pain proceeds from both diathesis, in all the different parts of the body, as in the head, the breast, loins, bowels, &c. arising from both kinds of disease, viz. asthenic and phlogistic; and also that inflammations are equally so, arising either from a phlogistic or asthenic diathesis. The effects of the asthenic are to diminish the functions by debilitating; nevertheless, they often exhibiting a false appearance of real inflammation, should be, with the greatest caution ascertained, and guarded against.--- Spasms are no more than contractions of muscular fibres, which, for want of due excitement, do not recover their alternating state of dilation, but always are contracted: this state arises from debility. If a proper excitement could always be preserved in the system, man would live for ever: but for two causes this cannot take place. First, because the quantity of excitability, which every animal acquires at its origin,

is gradually worn out by the force of natural stimuli, such as the blood, &c. or by the force of diseases or other exciting powers. Secondly, the asthenic disease puts an end to the excitement; because, in that case, for want of a due quantity of exciting powers, the excitability is so encreased, as to destroy life. From all this it is evident that animal life is a forced state: this is made manifest by respiration, which is an action necessary for animal life, but still is forced.

Of PREDISPOSITION.

IT is an intermediate state between good and bad health; or it is a deviation from that standard which constitutes sound health.

The same powers which constitute disease, constitute a propensity, by acting in a higher or less degree, or applied for a shorter or longer time. In either case,
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the exciting powers are the same, only operating in a less or greater degree; for they operate on the excitability in the same manner which those constituting disease do.

Before a disease comes on, a predisposition must precede it; for, a deviation from health must pass through the different degrees of predisposition, before a disease is constituted.

It may be objected to this theory, that some species of contagion assault and destroy the system so suddenly, as to leave no time for a predisposition previously to come on.

In answer to this, it may be said, that the facts related of the sudden destructive operation of the plague, are probably misrepresented; and even if they were true, the time of predisposition must exist previous to the disease, though it should not exceed a minute.

When.

When the contagious matter is not the chief agent in the disorder, according to the absurd notion of physicians, it is the predisposition; for if ~~the~~ contagious matter should be applied to a system not predisposed, a disease would not result from such an application; or if any, it will be merely local, as for example, when children in the small pox suck the breasts of their mothers or nurses, they will have a few pustules.*

In disorders of contagion, the time of predisposition will be longer or shorter, in proportion to the state of the system, and the violence of the contagious matter. The contagious matter acts like every other exciting power, either producing an encreased or diminished excitement, and must be understood to operate in the same manner, and to be cured by the same means; as like effects flow from like causes.

In order to distinguish between general and local diseases, there can be no better
distinguishing

distinguishing mark, than that in the former a predisposition always takes place, and in the latter none.

It is certain, however, that sometimes a general disorder may take place, without a predisposition, *i. e.* when it proceeds from a local affection. *Poisons* operating on a particular part, such as the stomach, must be considered as local at first, and affecting the whole excitability, and thereby producing a general disease. The cure is to be locally applied, if in our power, by a timely rejection or removal of the irritating matter, in case of poisons.

Of the DIAGNOSIS.

THE danger of all diseases, and their vehemence, is in direct proportion to the magnitude or deficiency of excitement; which alone makes the difference. The particular seat of disorders, which,
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in reality, is but a part of a general affection, gives rise to the different names and varieties of these disorders; viz. one part is somewhat more affected than another given equal part; tho' the disorder is general throughout the system; but this variety of its seat, is not very much attended to in the cure. The magnitude of the affection of a particular part, is not to be so much considered as the general affection. The only diagnosis of any moment is, that whereby we distinguish general diseases from local, or symptomatic ones, which last diseases, sometimes disturb the whole system, and thus put on the appearance of general disorder; the greatest help we can have, to discover if the disorder be general, is to consider if the diathesis of the patient was fitted for an asthenic, or phlogistic general disorder; if the disorder, which immediately followed such a general predisposition, is similar to the preceding diathesis; also, if the remedies used to cure the general affection, proved useful or not, viz. if the disorder is asthenic, and that debilitating remedies did harm,

we must conclude that it is such, and the reverse.

We know that a disorder is local, by knowing that a particular part was primarily affected by some known cause, that the repetition of that cause affects the system, as often as it is applied to it; also, by the absence of a preceding diathesis in the patient, to the disorder, which the local one resembles; the absence of this diathesis, or even if it did exist, and that a local injury was applied; I say, the absence of the diathesis proves it to be a local affection.*

In order to obtain a knowledge of local disorders, anatomy is necessary, as general disorders very often leave as effects, injuries of some of the intestines, or viscera; therefore, the more general affections the patient laboured under, the more we are to suspect, that the injuries of these viscera, are the effects of these several general disorders. This will help to guide our judgment, relative to apparent local

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injuries

injuries discovered on dissection ; and incline us to suppose, that they are effects of general, and not of local diseases.

Of the PROGNOSIS.

AS predisposition to disease, or diseases themselves, consist in different degrees of asthenic or phlogistic diathesis, and as the powers which constitute either diathesis, act somewhat more on one part than on another ; therefore, the danger of the predisposition, and also of the disease, will be in proportion to the greatness of the diathesis, or the utility of the part, viz. if it be an organ necessary for life as the lungs, the brain, or its membranes, altho' the disease, all over the system, be not great, still the danger will be considerable, as a slight injury of these organs would prove fatal.—On the contrary, if the disease affecting the whole system be great, and that the part mostly affected is not very necessary for life, we are not to apprehend so dangerous consequences, as
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in the former case. But if the disorder be equally diffused, and proportionably distributed throughout the body, without one part being much affected; in that case, our prognosis may be favourable.—From the above, it appears, that peripneumony, the gout, erysipelas, and apoplexy, are often fatal diseases, because they frequently assault organs immediately essential to life.

Of the METHOD of CURE.

AS asthenic and phlogistic diseases consist in superabundant or deficient excitement, the intention of cure must be to diminish the latter, and encrease the former; until a proper medium of excitement, is brought about.

As the same powers, all of the same kind, and operating exactly after the same manner, varying only in magnitude, constitute both forms of diseases; so these diseases are removed by the same operating powers, encreased or diminished to a certain

degree contrary to that which induced the disease ; in the one the excitement must be raised, in the other diminished. The remedies, in a phlogistic diathesis, are stimulating powers applied in a less degree than is necessary for health, viz. debilitants. The remedies in the asthenic are the same, applied in a greater degree than is necessary for health, viz. stimulants. These powers are to be applied more or less, as the the excitement, or the affection of the part which depends on that excitement points out. Also, we should make choice of these stimulant powers, so as to apply the most powerful in order to remove the most vehement affections ; but we are never to commit the cure of a vehement asthenic disease to one stimulant power only ; many, nay all, are often to be applied ; and in a violent phlogistic disease, venæsection alone is insufficient, altho' it is of all others the most debilitating power ; because, though it may depletethe larger blood vessels, its effect will not reach the smaller, or the serous, mucous, and exhalant ones ; in that case, powers
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that will more immediately empty them, must be applied, as purgatives; in like manner, in highly asthenic cases, as I said before, one stimulant is not sufficient; as tho' I give opium, and other stimulants, it will also often be necessary also to apply heat to the surface; nor are we to apply these powers to one particular spot, from a supposition that it is the seat of the disease; no the application must be to the system in general.

The reason, why more than one power should be applied for the cure of diseases, is, that the excitability may be the more fully and equably affected. It is true, that any power applied affects the excitability throughout, yet still the part, to which it is immediately applied, is more excited than other parts. If any symptom, of a well known and certain indication, is connected with others of a quite contrary indication, we are not to judge of this well known symptom by the concurrence of the other fallible symptoms, but we must judge of the concurrence by those symptoms, because the one is certain
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and the other uncertain; thus for instance, in a *Typhus**, altho' it be attended without delirium, heat, quickness of pulse, thirst, &c. yet, if there appears a real debility, we are to be guided by it in our application. This is evident in cases of *dyspepsia**, where bleeding is ordered, and vegetable diet, which prove injurious. It is true such perverse treatment may afford a temporary relief, but still it heightens the disorder afterwards. This *aphorism*, of Hippocrates' is true, viz. persons liable to belch up acids, are not subject to pleurisy, *i. e.* those that exhibit a certain symptom of debility, are not liable to phlogistic diseases.

The converse of this *aphorism* is equally true, viz. those that are subject to inflammatory diseases, as the peripneumony*, are not liable to fall into disorders of debility. As every disease, and predisposition to disease, consists in encreased or diminished excitement, our intention of cure must be to stimulate or debilitate proportionably; not to remain indifferent spectators

spectators, and commit the whole to nature. Dr. Stahl, and many others, fancied that there existed in the body a *vis medicatrix naturæ*, viz. a provident and intelligent being, which provided for the safety of the system, prevented the approach of any matter injurious to it, and eliminated that matter, when it happened to attach itself to it. There are, it is true, desires, appetites, and loathing to certain things in the system, as a desire of rest, when the body is fatigued, a desire of victuals, when hungry, a dislike to them, when satiated; a desire of cold, when hot; and *V. versa*. The passions of anger hatred, and mischief, will have revenge, and love, venereal gratitude, until each passion is satiated: but these appetites and desires are under no direction of reason, much less of a provident being, of which we are not conscious; they arise from a sense of pleasure or pain, more or less, operating on the body; not from a provident being in the system. These desires arise, because the body is so formed as necessarily to acquire different conformations,

mations, in consequence of different impressions, viz. that one power operating on it, will produce a different effect, to that which a different one will.

It is the sense of pleasing or painful impressions, that causes these appetites, and nothing like reason.

Thus, thirst and hunger are ardently avoided; thus sensual desires are gratified; in short, a blind impetuosity directs us, arising from necessity, not from any prescient or intelligent being.

If there existed in the system any thing like an intelligent being, active and provident, this being would surely prevent all diseases, and predispositions; this being would apply all the exciting powers, with so proper an adjustment, as to prevent a deviation from the standard necessary for health.

Under its direction, the excitability would be so proportionably stimulated, as
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that the system; after a series of years, would dissolve in consequence of a final, but gradual extinction of the excitable quality. But the matter is otherwise; few decay in that manner, without experiencing too high or too low excitement. Then there can be no provident being, or ideal, which without any indication of the impending injury, directs the helm of the system; and the blind impetus of our passions and appetites are many. We daily apply either highly exciting or highly debilitating powers to ourselves, without any notice from this intelligent being. What then is this phantom doing? Why does not she prevent diseases, and predispositions? Why does not she prevent us from making such applications? Why does not this *vis medicatrix naturæ*, prevent us from desiring strong diet, in predisposing us to, and even bringing on inflammations? Why does not she prevent us from luxury and sloth; the great sources of disorders? Are we not to prevent the effects of hunger, cold, and other debilitating powers, when applied? We surely are: Are we

not to prevent often the effects of even a benign hæmorrhagy? Certainly. What then is this vis doing? Are we not to prevent, by debilitating powers, the danger of the small pox or meazles? Are we not to do the same in mania? We surely should not commit them to this phantom on the other hand, are not we by highly exciting powers to obviate the effects of a typhus, or cynanche maligna? If a powerful stimulus is necessary for preserving the health of a strong man; why should it not when he is reduced by a debilitating disease? If gout, dyspepsia, or asthenia are brought on by powers, exciting so high as to induce indirect debility, in such a case are not we to apply gentle stimulants whose utility has been proved by facts, because too violent stimulants brought on the disease? In hæmorrhagy arising from direct or indirect debility, introduced, by too free an use of exciting powers, in rheumatism arising from too high excitement, ending in indirect debility, are not we to avoid the use of debilitating remedies, and applications, which in the beginning would

would have been of the greatest service, and apply stimulants? Is not the same to be observed in dropsy?*

On morbid MATTER, as a cause of
DISEASES.*

IF morbid matter happens to find its way into the system, we must only give it time to make its exit out again;

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* *The common Account of morbid MATTER, &c.*

MIASMA, contagion, and miasmata, as they relate to diseases, are productive of some of the febrile kinds, and of them only. They are generally floating in the atmosphere, when they are injurious to mankind; but they are not observed to act, but when they are near the sources, from whence they arise; that is near the bodies of men, from which they immediately issue, or near to some substances, which, as having been near to the bodies of men, are imbued with their effluvia; and in which substances these effluvia, are sometimes retained in an active state for a long time. It should here be remembered, that the notion of contagion properly implies a matter arising from the body of man, under disease; and that of miasma, a matter arising from other substances. Dr. Cullen remarks, that the substances imbued with the

whether it acts like every other exciting power, or preserves its specific form, we are to consider it in the light of either a stimulating or debilitating power.

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effluvia from the bodies of diseased men, may be called fomites ; and that it is probable that contagions, as they arise from fomites, are more powerful than as they arise immediately from the human body. Further, that tho' the fomites are possessed of matter from the human body, yet this matter passing from the fomites, is called miasma ; which requires further to be distinguished from the miasmata arising from marshes, &c. by the epithets human and marsh miasmata.

On this subject of contagion and miasma, Dr. Cullen observes as follows.

As fevers are so generally epidemic, it is probable that some matter floating in the atmosphere, and applied to the bodies of men, ought to be considered as the remote cause of fevers.

Contagions have been supposed to be of great variety ; and it is possible that it may be so ; but that they truly are, does not appear clearly, from any thing that we know at present.

The number of genera, and species of contagious diseases, of the class pyrexiaë, at present known, is not very great. They belong to the order of fevers, of exanthemata, or of profluvia.

The reason why morbid matter cannot be suddenly *eliminated* is, because it gradually ferments and converts the fluids less or more, into its own nature, therefore

Whether there be any belonging to the order of phlegmasiæ, is doubtful; and, tho' it should be supposed, it will not much increase the number of contagious pyrexia. Of the contagious exanthemata and profluvia, the number of species is nearly ascertained; and each of them is so far of a determined nature, that, tho' they have now been observed and distinguished for many ages, and in many different parts of the earth, they have been always found to retain the same general character, and to differ only in circumstances, which may be imputed to season, climate, and other external causes; or to the peculiar constitutions of the several persons affected. It is therefore probable, that, in each of these species, the contagion is of one specific nature, and that the number of contagious exanthemata, or profluvia, is hardly greater than the number of species taken notice of in our system of nosology.

While the contagious exanthemata and profluvia are thus limited, it is probable that the contagions which produce the continued fevers are not many; nay, it is not evident, that there are more than one common source of them.

It is well known, that the effluvia constantly arising from the living human body, if long retained in the same place, without being diffused in the atmosphere,

fore as it is diffused through all of them, it requires a great quantity of humours to pass off, so as to bring along with them this morbid matter, and this requires a
length

acquires a singular virulence, and in that state, applied to the bodies of men, becomes the cause of a fever which is very contagious.

The late observations on jail and hospital fevers, have fully proved the existence of such a cause ; and it is sufficiently obvious, that the same virulent matter may be produced in many other places. At the same time, the nature of the fevers arising, render it probable, that the virulent state of human effluvia, is the common cause of such fevers, as they differ only in a state of their symptoms, which may be imputed to the circumstances of season, climate, &c. concerning with the contagion, and modifying its force. Miasmata arise from various sources, and are of different kinds ; but we know little of their variety, or of their several effects.

We know with certainty only, one species of miasma, which can be considered as the cause of fevers ; and from the universality of this, it may be doubted of if there be any other.

The miasma, so universally the cause of fevers, is that which arises from marshes, or moist ground, acted upon by heat. So many observations have now been made with respect to this, in so many different regions of the earth, that there is neither any doubt of its being

length of time,—no purgatives* or evacuants can effect this, nor can it be changed in the fluids, so as to become innoxious; and even if morbid matter prevailed in the system, it operates like every other exciting power. As in asthenic, as also in phlogistic diseases; and their predispositions, I shall prove, that perspiration is suppressed, so this perspiration is to be supported, that the morbid matter, if any there be, should pass off along with it; but this does not furnish us with any new indication.

in general a cause of fevers, nor of its being very universally the cause of intermittent fevers, in all their different forms. The similarity of the climate, season, and soil, in which intermittents arise, and the similarity of the diseases, arising in different regions, concur in proving that there is one common cause of these diseases, and that this is marsh miasma.

What is the particular nature of this *miasma*, we know not; nor do we certainly know whether or not it differs in kind; but it is probable that it does not, and that it differs only in the degree of its power, or perhaps in its quality, in a given space. It remains most probable, that the remote causes of fevers, are chiefly contagions or *miasmata*, and neither of them of great variety. *Miasmata* are supposed to cause intermittents,

indication.* Cold; as I shall afterwards prove, does not prevent perspiration, as is supposed, nay it encreases it, as appears in many phlogistic diseases. Besides, cold cannot be supposed a general affection of the system acting by constriction; as is also taught; because, in that case “according to received opinions,” it does not operate immediately on the excitability; the nervous or muscular system, but on the simple solids, which are by no means excitable: and such a constriction on a part, would be a topical affection, and the general affection resulting therefrom, a symptom, which is absurd. In no case are we to direct our cure to any
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and contagions to cause continued fevers, strictly so named.

It may further be added, that both contagion and *miasmata*, are of a debilitating, or sedative quality. They arise from a putrescent matter. Their production is favoured, and their power encreased, by circumstances which favour putrefaction; and they often prove putrefactive ferments, with respect to the animal fluids. Though fevers generally arise from marsh or human effluvia, and other remote causes of fevers, which have been commonly supposed, cannot with any certainty be excluded. See *Cullen's First Lines*, Vol. I.

of the simple solids, or fluids, which are unexcitable, but always to the parts excitable, viz. the nerves, and muscular system, as, every exciting power operates on the whole of it, not on any particular part. As in advanced life the *excitability* diminished, by the operation of the exciting powers requires such an application of them as is necessary for life, but still not so great as quickly to wear out all the *excitability*; and as in consequence of too small an application of these powers, direct debility takes place; should we not apply proportionably stimulant powers, although the too great application of them, originally occasioned the disorder. A person when young, strong, and in health, is in advanced life liable to *apoplexy*;* are we

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*The following is the common opinion, &c. of it. Apoplexy is derived from *αποπλησσω*, to *strike* or *knock down*; or *smite suddenly*; the Latins call it *attonitus morbus*. It is also called *fideratio*, *attonitus stupor*. Dr. Cullen ranks this genus of disease in the class *neuroses*, and the order *comata*. He also takes notice of nine species, besides those instances in which it is symptomatic, viz. 1st. *Apoplexia sanguina*, with signs of an universal plethora and chiefly of fullness in the head.

to suppose, as that man when young and in high excitement, was not liable to it, that he becomes afterwards liable to it when his excitement is low? No, he should be most liable to it in the former state, (if the common opinion of *apoplexy* was true) when his excitement is very high. If in such cases of low excitement we retrench the patient's living, we add direct to indirect debility, and thus encrease the disorder

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2d. *Apoplexia serosa*, which is generally in aged and leucophlegmatic people. 3d. *Apoplexia hydrocephalica*; 4th. *Apoplexia atrabilaria*, observed in persons disposed to melancholy. 5th. *Apoplexia traumatica*; when the head is hurt by violent external force. 6th. *Apoplexia venenata*, from poisonous matters, whether externally applied, or internally taken. 7th. *Apoplexia mentalis*; from passions of the mind. 8th. *Apoplexia cataleptica*, in which the respiration is not stertorous, and though the limbs maintain any accidental position, yet they give way to external force applied to them. 9th. *Apoplexia suffocata*, which happens in case of hanging and drowning. An *Apoplexia* is a sudden privation of all sense and voluntary motion; the pulse, at the same time, being kept up, but respiration is oppressed. A deep sleep, with insensibility, and snorting, seem to be constant attendants. Dr. Cullen says, "The *apoplexy*

four-fold, and more so, if directly debilitating powers followed after stimulants immediately. In this case we should follow the tonic plan.

Heat is necessary for vegetation, growth, and the perfection of animals and vegetables, neither can they be at first formed without a due quantity of it, nor grow, or come to perfection ; even their constituent particles cannot preserve their form without it : and water which constitutes

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so

is that disease in which the whole of the external and internal senses, and the whole of the voluntary motions, are in some degree abolished ; while respiration and the action of the heart continue to be performed. To the definition of *apoplexy*, he adds, that the abolition of the powers of sense and motion, is in some degree only ; meaning by this, to imply, that under the title of *apoplexy*, are comprehended those diseases, which, as differing from it in degree only, cannot, with a view either to pathology or practice, be properly distinguished from it. Such are the diseases named *carus*, *cataphora*, *coma*, and *lethargus*. Lomnius observes, that this disorder is generally ushered in by sudden and acute pains in the head, vertigo, dimness of sight, grinding the teeth during sleep, a coldness of the whole body, especially the extremities ; then, as though thunder-struck, the patient falls down sometimes with shrieks ; imme-

so great a part of them would be frozen, and the pores of the earth so necessary for their growth would acquire a different conformation, the air in them would be frozen to a solid. Heat, being applied to the surface of the body, stimulates it more than any other part, such as the internal, which is mostly uniform in its quantity of heat. This stimulus applied in a just quantity encreases the tone, density, or *excitement* of the muscular fibres, and consequently the diameters of
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diately after the eyes are shut, a snorting comes on, the difficulty of breathing is great, endangering suffocation, the breast ceases to heave just as if it was bound with cords; sense and voluntary motion are entirely lost.

There are different species of apoplexies, which demand our utmost attention, as the cure is very different in each, particularly the two first, the others agreeing more with the second. The first is the sanguineous *apoplexy*, in which we find a strong full pulse, a red and bloated visage, the patient's neck swelled, an oppressed loud respiration, with a little hoarseness. This species prevails amongst the robust who have much blood, loaded with crassamentum. The second is the serous *apoplexy*, in which the symptoms are, in general, like those in the former species, except that the pulse is weaker,

the muscular vessels are lessened. This diminution being always as their density and the density as their tone or excitement, therefore the diameters of the vessels on the surface where the heat is most applied are almost entirely closed, in some cases. Thus then the perspiration is suppressed by an increased stimulus : this appears evident in inflammatory diseases, as the small pox and measles, when the irritating matter is retained and perspiration suppressed, in consequence of a greater excitement on the
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the countenance pale, or at least far less ruddy, and the breathing less oppressed. The third is the spasmodic *apoplexy* ; the same signs attend this as are usual in the second species, only it is sooner removed, and rarely degenerates into a palsy. The fourth is the symptomatic, such as from flatus in the stomach, the gout, &c.

The remote cause is a plethora, the antecedent cause is some great commotion of body or of mind, as from violent exercise, hard drinking, passion of the mind, &c. the immediate cause is a compression of the brain. The sanguineous hath, for a general and principal cause, an increased vital heat, the serous a defective heat, and the other species have some cause which renders the diffusion of the vital heat irregular, whence spasms, which are a mediate cause of this disorder. It should be remembered here, that the crassamentum of the

surface, than in the internal parts ; on the other hand heat, even moderate, when too long applied, or violent and of short duration, induces debility, diminishes the tone and density of the vessels, produces laxity and opens the perspiratory pores. This effect is greater on the surface, than on the internal parts, where the heat is equable. In consequence of this laxity the sweat is encreased, as in hot climates, and as in *fevers* which are attended with *colliquative* sweats ; in the confluent small pox, which
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blood is the attractor of the vital fire, the nerves conduct it, and the brain is its principal reservoir : various causes may determine this fire in greater quantities to a particular part, than what is necessary for the due discharge of its functions, or it may be directed with a more than ordinary speed and force there ; and in proportion to the quantity ; or the velocity of it, in the apoplectic strokes, the part to which it is directed will suffer, both as to suddenness and danger : should it be determined thus to the heart and arteries, circulation would be stopped, and death the immediate consequence ; but directed to the seat of sensation, and the origin of all voluntary motion, an *Apoplexy* is produced. The serous *apoplexy* hath for its general and its principal cause too, a defect of vital heat ; whence the redundancy of serum, to which this species is usually

is occasioned not by heat opening the pores, but by the indirect debility, induced by heat on the heart, and arteries, which being communicated to the extreme vessels they consequently transmit the perspirable matter in the greatest abundance. Over and above what I have said of cold, if cold by constriction brought on a general disease, heat would remove it but heat instead of removing it encreases it. Heat in phlogistic diseases proves injurious. As heat removes the cold in diseases, should not

attributed : farther, the crassamentum not being able to attract the degree of heat requisite for the due distension of the cells of the cellular membrane, and the contraction of the fibres, occurring circumstances easily deprive particular parts of their heat, and cause it to rush with violence on some other ; and a suddenly deficient distribution of the vital fluid produces similar effects, in some instances, to an excessive one. And, as to all other species which indeed are but symptomatic, it is as the morbid cause, hath an influence on the heat with respect to its distribution, so that it is productive of this disease.

Dr. *Cullen* thinks that the proximate cause is; in general, what ever interrupts the motion of the nervous power, whether from the brain or to it. Of *apoplexics* from internal causes, he thinks the motion of the ner-

not then the effects of cold be removed; viz. the disorder? Yes, surely or an effect must be supposed to survive its cause.

On L E N T O R, &c.

IF *Lentor* was the common cause of diseases, our common intention of cure should be to inspissate or attenuate the fluids, and all our remedies should be whatever did the one or the other; but if the doctrine

vous power is interrupted by some compression on the origin of the nerves; and this compression is occasioned by an accumulation of blood in the veins of the head. In *apoplexies* from external causes, the motion of the nervous power is interrupted by directly destroying its mobility; as when mephitic air, fumes from charcoal, &c. are admitted to the nerves.

From an attention to the symptoms of an *apoplexy*, and the appearances observed on dissecting those to whom it had proved fatal, the brain is most probably its seat. Wepser, in his histories of those subjects, observes, that the vessels in their brains were often ruptured, or very turgid: at other times the ventricles of the brain were filled with a watery humour; or a portion of serum, &c. was found betwixt the brain and its membranes.

doctrine laid down; and method of cure, which see; be true, it must be allowed that this opinion is taken upon false grounds:

What diseases are they which proceed from spessitude of the blood, as a cause which can be cured by mere water, which, was it the cause of such disorders, ought to remove all diseases, depending upon it as a cause.

Whereas there is no such blood found; for, in inflammatory diseases, where a
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buffy

Old men, tho' indolent; those who indulge in gluttony or drunkenness, and short-necked people, are the most subject to *apoplexy*,

This disorder should be distinguished in its species, and also from those other maladies to which it bears a resemblance. The sanguine *apoplexy* must be distinguished from the serous and the symptomatic; and each from one another; and *apoplexies* must be distinguished from a lethargy, an epilepsy, hysteric, suffocations, a palsy, a carus. a catalepsis, a syncope.

The danger seems to be chiefly proportioned to the difficulty of respiration; if it is tolerably easy, and the patient can swallow, there is good hope; but if respiration is very difficult, or intermittent, and what is

buffy coat is found, which was supposed to prove the thickness of the blood, still in fact it is more fluid, in which case you may conceive of its fluidity from its penetrating into vessels, which could not otherwise admit it; and how can venesection, purging of any kind, or abstinence, or rest of body or mind, which have been recommended, &c. tend to attenuate the blood? Or how can too much blood, or high living, strong drink one time, and sloth another time, or excess of labour,

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given the patient to drink, returns immediately by the nose, a recovery is hardly to be effected.

Those who have been attacked with any kind of *apoplexy*, are subject to relapses, each of which are more dangerous than the preceding; to prevent which due regard should be had to all that can conduce thereto, that it may be avoided; suppers, hot rooms, violent exercise, particularly in the sun, going to bed late, long sleeps, continuing in the cold, especially if the feet are subject to be so, and whatever is suspected to dispose to this disorder must be watched against.

In order to the cure, in case of the sanguine species, immediately uncover the patients head, raise it up as high as possible, and give him the advantage of fresh air.

or too great exertion of the mental faculty, acting as noxious exciting powers ; I say, how can they be supposed to condense and inspissate the blood ?

Again, what disease can arise from thin watery blood ? Is it the dropfy ? No ; the dropfy is consequent to a well known diathesis, it comes on by degrees, like every other universal disease, and passing thro' the intermediate stages of predisposition, ascends at last to that magnitude which

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constitutes

If it can conveniently be done, bleed, *ad deliquium*, to reduce the vital heat ; ten or sixteen ounces may be taken away immediately, and the same quantity may be repeated in an hour or more, according as the pulse will admit. Some assert an extraordinary efficacy from opening the temporal artery during the fit. Dr. Cullen observes, that, when an attack of *apoplexy* is immediately threatened, blood-letting is certainly the remedy to be depended on, and should be taken largely, if it can be done from the jugular vein, or the temporal artery. But, when no threatening turgescence appears, the obviating plethora is best effected by leeches applied to the temples, or scarifications of the hind head : and these are more safe than general bleedings. When there are manifest symptoms of a plethoric state in the vessels of the head, a seton, or pea issue, near the head, may be very useful in obviating the turgescence of the blood.

constitutes disease. The same powers which constitute predisposition, constitute disease of both species, viz. powers either exciting too much or not sufficiently. How can these powers, which are said to cure one species of disease, by attenuating the blood, by the same manner of operation, bring on the other? And how can the usual remedies of this class of diseases, viz. the same powers that constitute the phlogistic class, bring about health, by inspissating the fluids? In the one case they

Lenient clysters, with a table spoonful of common salt in each, should be given as speedily as possible, and repeated every three or four hours until proper means can be administered by the mouth.

Cooling medicines should be given as soon as they can be swallowed, let the first be a brisk but cooling purge with nitre.

In the fit some assert that a handful of common salt, dissolved in a pint of water, if poured down the patients throat, will speedily recover him: the trial is easy, and nothing to be feared in case of failure.

Blisters may be applied all over the feet. Dr. Cullen prefers the application of them to the head.

they do not prove noxious by inspissation, but by encreasing excitement; nor do they prove a remedy in the other case by attenuating, but by diminishing excitement.

If without injury of the living solids, without any fault in the excitement, blood too thin or too thick, was the origin of diseases, this redundancy or want of water alone would be the cause of every affection.

But water, however largely taken into a sound system, passes spontaneously thro' all

Keep the patient still and calm, and let his diet be aqueous, and such as affords the least nourishment.

In the serous kind, bleeding is rarely to be admitted, but purging with the tinct. sac. (or such like) will be absolutely necessary, as soon as the patient can be made to swallow, and repeat the dose every third day.

Raise his head high, as already advised, and try to pour down the solution of common salt, above hinted at.

Wrap the feet warm in hot flannels. Clysters may be repeated twice a day, and made as directed in the sanguine *apoplexy*.

Dr. George Fordyce thinks that the compression producing apoplexy, seldom or never arises from the

all the excretories of the body, without any disease being the consequence. No man in health, after drinking water in the greatest plenty, falls into a dropsy, nor ever will, nor is any disease produced by taking in water in a small quantity; indeed whatever is necessary is desired, by the impression of thirst.

Besides, without water, and even without fluids, furnished with water, the deficiency or want of it is often borne a long time, without great inconvenience.

Some

serious part of the blood being extravasated, or, &c. but adds, whether blood or serum be the cause, the same methods must be pursued for relief; and besides bleeding, to relieve the brain, he urges the advantage of purging, which he says diminishes the circulation from the brain as well as from the intestines. The more active purgatives he recommends, and to repeat them so as to keep up the secretion that way.

Apply blisters to the shoulders, and on the fleshy parts of the legs.

Volatile. Spirits, with valerian, aromatics, and ferrugineous medicines, are to be directed. There, as indeed all stimulants, are least hazardous and most useful, when the fit is not present.

Some people almost constantly thro' custom drink water, others scarce ever drink any, without any great detriment to either; nor after an abundance, or deficiency of water, do diseases attack the system, except by a previous application of stimulating or debilitating powers, which, in other circumstances, constitute universal diseases; and which hurt by encreasing or diminishing excitement. The spissitude or tenuity of the fluids is then an imaginary source of disease. Show me one disease

The diet must be light, but cordial and nourishing. In gross habits mustard-seed may be swallowed whole two or three times a day, to the quantity of a table spoonful each dose. Horse-radish may be eaten freely.

In the spasmodic, or other symptomatic kinds of *apoplexies*, an attention to the general habit of body, and the nature of the disease attending, will lead most directly to the cure.

Dr. Flemmyng recommends trepanning as a powerful assistant in the cure of *apoplexies*, by taking off a degree of pressure from the brain. See his observations on this subject, in the Med. Mus. vol. II. page, 300, &c.

disease which can arise from the state of the blood being altered; without the usual noxious powers being applied, in the usual manner, that produces disease.

In fine, Sydenham's indication of cure, by drawing blood, purging, cooling, and proceeding on the antiphlogistic plan, is very suitable to the first class of diseases, being alone applied in the humoral pathology and method of cure, and then neglected or used with indifference, and applied with inattention, it proves the vanity and falsity of that method of cure, which again proves the cause to be equally vain and false.

Lastly, that doctrine is to be rejected on this account, that it rests upon an effect trifling, and of little moment.

“ That

Coelius Aurelianus. Lommii Opusc. Aureum. Aretæus, Philumenus, Galen, Paulus Ægineta, Baglivi, Boerhaave, Shebbeare's Theory and Practice of Physic. Tissot's Practical Obs. on the *apoplexy*. Brookes's and the London Practice of Physic. Cullen's First Lines, vol. III. and for Dr. Brown's particular History of Apoplexy and the method of Cure. See the Second vol. of this Work.

“ That is the observation of a buffy coat which was taken up erroneously as a true symptom of an inflammatory disease.

If the vessels are strong the parts of the blood will be more perfectly united, but the blood itself will be indeed more dense, yet still more fluid, and will become more fit for penetrating into the very recesses of the body.

On the other hand, the blood will in consequence of weak vessels, be less perfectly united, the watery parts will spontaneously separate from the more thick, the latter rushing out where a passage is opened, discharging themselves thro' the vessels which transmit watery fluids; the former will be retained at first in the blood vessels, but in the end will pass to the extremities of the body, thro' the same passages, growing wider and wider every instant.

The former will account for the floridness of the complexion, in one species of disease, and for the paleness in another.

The cause of the one is too high excitement, of the other deficient excitement, which being in a suitable degree, and just the state of the blood is equally so. The humoral doctrine then is in every respect false.

Of ACRIMONY.

AS the blood is more bland, the quicker its motion is, if that motion be not too great; and the slower the motion, the more acrid it is, and as probably no acrimony enters the blood from without, or if it does, it is evident no remedies can do service in such a case, but the common remedies; and as the only acrimony of moment beyond the *primæ viæ* depends on debility, therefore except only to remove an accumulation of fordes, our intention of cure should be the same in case of acrimony, as in all other disorders of debility.

There

There are often violent pains in the stomach and bowels caused by an acid, which arises from debility. This acid is not the source of the cause, but a symptom coming on when the disease is formed from its cause, debility, and if not timely removed exasperates the disease.

There is no method of cure effectual in this case but such as removes debility; any other means are only palliative, and ineffectual.

On S P A S M.*

WHATEVER intention of cure *spasm* affords, it must necessarily differ from the method of cure of any of the two species of diseases, inasmuch as the

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state

The Common ACCOUNT of SPASM.

* SPASM, is derived from $\sigma\pi\acute{\alpha}\omega$, *to draw*, a spasm, a convulsion, a strain. A *spasm* may be said to be present when any part of the human body, by the influence of the muscular membranous, or nervous fibres, is contracted involuntary. This *spastic* affection particularly affects the nervous and membranous parts; such as the stomach, and the whole volume of the intestines;

state of the body (in any or either which we wish to restore) is demonstrated to be the cause in the other, and it is repugnant to common sense, that the state could

whence proceed the hysteric and hypochondriac passions. A *spasm* is also present when there is an hæmorrhage, a congestion of blood, unequal flux of the fluids, anxieties, and suppressed excretions. A *spasm*, affecting the dura mater considerably, occasions contractions of the whole nervous and membranous system, whence an epilepsy, or universal convulsion. *Spasms* in the medulla spinalis produce convulsions, viz. obstructed perspiration, hæmorrhages, costiveness, stranguary, asthma, &c.

SPASMI. Spasmodic disease, in Dr. Cullen's Nology, this is an order in the class neuroses. The term *spasm* hath been variously used; in the most common sense, it hath signified any preternatural contraction of any particular part of the body, either without any stimulus immediately applied to the part, or which remains its cause is removed. More properly *spasms* are those preternatural contractions, which are attended with considerable mobility of the system. Dr. Cullen defines *spasm* to be a preternatural motion of the muscles, or of the muscular fibres; and under the title of *spasmodic* affections, he includes all the diseases which consist in the preternatural state of the contraction and motion of the muscular, or moving fibres in any part of the body.

could be both the cause and the contrary ;† besides *spasm* cannot be the cause of phlogistic diseases, because the noxious exciting

The *spasmi*, have generally been divided into the tonici and clonici, spastici agiterii, or motorii and *spasms*, strictly so called, and convulsions. But most of the diseases called *spasmodic*, are in respect to tonic or clonic, of so mixed a nature, that it seems preferable to arrange *spasmodic* disorders according as they effect the several functions, animal, vital, or natural. See *Cullen's First Lines*, viii.

SPASMUS. A Spasm, the cramp, or convulsions, from $\sigma\pi\alpha\omega$, to draw.

SPASMUS CLONICUS. Clonic spasm. In a morbid state, the contraction of the muscles, or of the muscular fibres, are voluntary, and are excited by unusual and unnatural causes. When the contractions are succeeded by a relaxation, but at the same time, are repeated without the concurrence of the will, or the repetition of the natural causes, and are, at the same time, repeated more frequently, and commonly more violently, than in a healthy state ; this state of morbid contraction hath been named *clonic spasm*, and is what Dr. Cullen, in his *Nosology*, names *convulsions*. See *Cullen's First Lines*, viii.

SARDONIUS RISUS. Sardonian laughter. A convulsive involuntariy laughter, and is thus named from the herba Sardonias, which is a Species of ranunculus, and is said to produce such convulsive motions

citing powers do not tend to constitute *spasm*, nor the remedies to remove it.

How can stimulants, which, by encreasing the excitement, encrease first all the actions, afterwards disturb some, lessen others, and continue to encrease the rest? Or how can they desert the whole body besides, and turn all their fury on its surface? How can venesection, and evacuants of all kinds, and low diet, which by lessening the distention, and consequently the

in the cheeks as resembling those motions which are observed in the face during a fit of laughter. This complaint is sometimes speedily fatal. If the ranunculus happens to be the cause, the cure must be attempted by means of a vomit, and frequent draughts of hydromel with milk.

SPASMUS TONICUS. Tonic spasm. In a morbid state, the contraction of the muscles, or of the muscular fibres, are involuntary, and are excited by unusual and unnatural causes. When the contractions are to a violent degree, and are neither succeeded by a spontaneous relaxation, nor readily yield to an extention, either from the action of antagonist muscles, or from other extending powers applied; this state of contractions is what hath been called a *tonic spasm*, and what Dr. Cullen names strictly and simply, a *spasm*.

the stimulus applied to all the vessels, lessen the excitement all over the body? How can rest of the body, which retards the blood? How can rest, of the mental faculty, and tranquility of mind, which denotes the weak application of a powerful stimulus, to the brain? I say, how can they neglect their wellknown office of acting on the system in general, and as if it was seized with a sudden distraction or madness, each or all, direct their whole fury on the extreme vessels? Shew me one exciting noxious power that constitutes a spasm? Shew me even one remedy that will remove it, and then I will allow you a similar operation of the rest, and will easily go into your opinion, which attributes the cause of a phlogistic diathesis to *spasm*.

What then is predisposition? What becomes of it? How is it to be explained, if *spasm* is to be taken up as the cause of disease?

By taking in too much victuals alone, and want of exercise, a person may be brought,

brought, from the hair breadth of good health, thro' all the different stages of predisposition, into a violent peripneumony; and, as was said before, when this is brought about, what difference is there in the state of the system, the day the disorder made its attack, and the day before it? Are the vessels, which are full this day, to be supposed empty the day before, or does the pulse, from being feeble, small, and soft, become strong, full, and hard all of a sudden, at the approach of a disease?

And does the phlogistic diathesis rush into the system, as if it were, at one bounce? Is there no encrease of strength, vigour of mind, or power of affections, which are observed in a phlogistic diathesis, neither the contrary in a contrary diathesis, nor even a deviation from sound health to be seen, before the approach of the disease?

Does a man that is predisposed to dropsy, or in the very disease, in an instant of time fall into a pleurisy? Or does the

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^{of hum}Indication of the exciting powers act on the body in vain, during all the rest of the predisposition, and beginning of the disease? Will the various stimuli then of too intense thought, of anger, of plentiful victuals and well seasoned, of strong drink, of blood, abundant all over the body, besides put in motion by exercise? I say, do not those various stimuli, operating very long in high degree, constantly prevail by degrees.*

On the other hand, is it to be supposed that they excite the disease, by a sudden assault, and constitute it, by bringing on a spasm, on the extreme vessels, and not distending the rest of the body? Will predisposition, which always, in most diseases, (altho' not sufficiently understood, has been admitted) be necessary to constitute spasm? It must be so (that is, it cant be denied) a predisposition to this and other general diseases will be admitted; and if it be admitted, it cannot be denied but it is connected with the state of the disease, and that predisposition, differs little from it,

the one bordering immediately on the other.

Every other symptom, which characterizes the commencement of a disease, ^{can be thus accounted for} (if you except a slight confusion of some of the actions,) depending also on the same powers, on which the state of the other actions depend, and which are to be removed by the same means. And, therefore, if spasm be peculiar to the former, it must be to the latter; but spasm is by no means asserted to take place in predisposition; nay it is even admitted to be absent; therefore, we are not to admit its existence in disease.)

Therefore, inasmuch as the same exciting powers, which constitute disease, constitute also predisposition, and are found to constitute both, by the same mode of operation, the same effects must be judged to flow from their common operation, and not one effect in one case, and a different effect in another.

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Whence it is clear, that spasm, which is wanting in predisposition, cannot exist in disease.*

In fine, as spasm is said to arise from debility, see Dr. Cullen's First Lines of the Practice of Physic, even on this very account, it must necessarily be different from phlogistic diseases; for debility cannot take place in diseases which depend on too much vigour as a cause, which thing is powerfully confirmed by stimulants causing these diseases, and debilitants removing them effectually; whereas, there are some symptoms, such as horror, languor, and lassitude, which indicate a diminution of the actions, and therefore may be said to prove debility also as a cause; nevertheless, no debility takes place, which as a cause, might produce these symptoms; so that order is evidenced from this circumstance alone, because the same noxious powers, which stimulate too much, create those too, and the same remedies remove them which remove all the other symptoms.

If venesection allays the great action of the vessels, and removes the other symptoms of the disease, will not the horror, languor, and lassitude be removed also at the same time? Which, if they can be removed by a debilitating power, can they be supposed to proceed from the same power? Who is it could say so?

Spasm cannot be said to be the cause of phlogistic diseases, because, besides that in them no debility exists, a distention, or any thing representing it, is intirely wanting to the fibres of the extreme vessels which distention, will be afterwards proved, to be necessary, in order to constitute spasm with an atony and laxity of fibres, how much does this distention differ from that, which induces a spasm on the stomach, intestines, bladder, renal vessels, or biliary ducts.

Besides, if it was sufficient to cause a spasm, the spasm should not attack the extreme vessels, but all the rest of the vessels, which are filled more than those! but neither the one nor the other is true, nor
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can any thing which represents distention in effect, such as whatever causes a tetanic spasm, discharge the office of distention in this place, for whatever that be it belongs to the muscles, and is connected with the effect of the will, to which the vessels, and organs of involuntary motion cannot be subjected.

Lastly. Phlogistic diseases must be free from spasm, because, spasm is peculiar to those diseases, whose cause is debility; whereas, all the symptoms of phlogistic diseases are proved to arise from too much vigour as a cause.

There is no proof more certain of a disease being asthenic, and of the absence of a phlogistic disease, than the presence of spasm, or convulsion.

This observation cannot but be of the greatest service, both in the diagnosis and cure, and from the same you may learn how great this error must be, which not only connects spasm with a phlogistic diathesis but even supposes it the cause of that diathesis;

diathesis ; and does not attribute it to its proper cause, but a new and unsuitable one.

There is nothing more consistent with itself than nature, nothing more observant of order and form, wherever she shews any part of herself, you may be assured that the other parts are arranged in their proper order. Some nearer, some more remote, some contiguous and others removed at a distance, all arranged like the limbs in a man's body, and disposed in their proper places, so as that to be sure that any one limb is not connected with any other in disorder.

As spasm then in phlogistic diseases, but especially when supposed to attack the extreme vessels, is the same thing, as if you supposed one of the feet to grow out of the forehead.

But, on the other hand, by supposing a spasm to attack some of the interior cavities in asthenic diseases, which are characterized by general symptoms of debility,

ty, and a distention of the part affected, you will set the foot in its own place back again, corresponding to the other foot and lying under the thighs and relative parts of the body.

Over and above to the arguments already mentioned the following may be added, that spasm in consideration of the cause of phlogistic diseases is intirely nugatory, as I have at full length proved, that a phlogistic diathesis alone, is sufficient for constituting phlogistic diseases. Besides, what is considered as spasm in those diseases, is nothing else than the phlogistic diathesis being more abundant on the surface than interior parts of the body, which shall be hereafter proved at full length.

The real state is an encreased density of the muscular fibres from an encreased excitement, diminishing the diameters of all the vessels, and closing up some of them; which state, is brought about by nothing else but the noxious stimulating powers, which

which constitute all the other symptoms, and which are removed by debilitants alone, which also remove all the disease from all parts of the system, to the same thing belongs also this truth, that the former alone create a predisposition to disease, and the latter remove and prevent it. What can the simplicity of nature require more simple than this explanation? Or what can be more repugnant to the doctrine of spasm?

As spasm is intirely excluded from the cause of phlogistic diseases, so it has no more to do with the extreme vessels in fevers, which you are to consider as asthenic diseases; in which fevers altho' debility, which is required for constituting *spasm*, and indeed is necessary to constitute it, when it attacks the interior parts of the body, is not wanting, nevertheless distention which is as necessary is absent, but if those vessels being so much filled and distended as they are accustomed to be in a phlogistic diathesis, nevertheless do not arrive at a distention sufficient for creating spasm; these

same vessels now when empty, as in the case of debility, are much less to be supposed to arrive at the same degree of distention. Distention is necessary for every kind of spasm (if you except one kind of it;) which exception does not invalidate my argument. In dyspepsia, a sordes or air let loose, and in like manner in the gout, which is a peculiar dyspepsia, in the cholic; air also and imparted fæces, in the renal and biliferous ducts, concretions constitute the distending cause. What is there in the extreme vessels of a person in a fever like, or analogous to these distending cause?

Tetanic spasm is that which does not require a distending cause, but that there is something like distention in this too, is proved by a similarity of effects, the consideration of which does not make anything for proving this spasm on the surface, as it is called by a certain Gentleman; its place being in the muscles, and consequently connected with the will, does not admit us to attribute it to the

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same cause. As this is the case, hear the arguments in defence of spasm on the surface; in it the skin grows pale, the body is lessened, swellings, &c. decrease, ulcers are dried up, rings fall off, &c. but the cause of paleness and diminution of size is easy to be understood, viz. they take place in consequence of the general debility, in which the heart participating of this debility which is general, cannot propel the blood to the extreme vessels, the same is the cause, of the diminution of tumors and drying of ulcers.

If spasm was the cause of these affections, see what would follow. However slowly the blood may move, it would not stop before it reached the extreme vessels, and would be collected and accumulated there, and being thus accumulated, would distend such parts of the vessels as are open, would press on the contiguous parts of the vessels, and fill the adjacent parts all around, and being thus abundant, in a little time would restore the colour, and in fine would encrease the discharge of ulcers, altho' being
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ing checked in the beginning by the spasm, in consequence of their being soon enlarged, and in consequence of some of the vessels, being closed and eroded by the encreasing acrimony, &c.

The only arguments which have been advanced to support the opinion of spasm, refute it, and prove debility as the cause.

I know very well you will say that the extreme vessels alone, are not affected, but also a contiguous portion of the same vessels are equally affected, but from what indication will you say so? Will the paleness, diminution of size, decrease of tumors, and drying of ulcers in the parts which are visible, illustrate the state of the parts which are not visible? but you, as an author, will say what is necessary for your own purpose to take place, but what is not easy for others to prove; but let me grant you your spasm for a time, provided you promise that you will hold it fast, and not let it fly out of your hand. In the beginning of a typhus fever, that the skin

is dry, and at the end of it, the sweat is clammy and thick, is true; it happens too in some cases that intire blood, with all its parts, passes thro' all the pores; What is your spasm doing now? What is become of it? How comes it that this spasm, which proves an obstacle to the insensible perspiration, can now transmit, even the thickest fluid in the body, (*as in petechæ &c.*) What kind of a spasm is this, which opens a diameter three times greater than that which takes place, when there is no spasm at all, as in sound and natural health? Even now, you will not admit that spasm is taken off, because you must forsooth know, that while this fever, which is the effect of spasm, remains, nay encreases, the spasm, as the cause, must remain and encrease. A consideration of the operation of the common powers, to create predisposition to fever, and fever itself, overturns the idea of spasm; for how can cold following the nature of its operation, which is always to corrupt or debilitate? Or how can heat, the former directly, and the latter indirectly, debilitating

litating? How can hunger? How can fear, grief, immoderate venery, the loss of blood, and the other fluids of the body, and weakness left as an effect of former diseases, which both in predisposition and in disease operate on the whole body, and excitability by debilitating them? I say, how can all these powers be supposed to desert their usual operations, in the beginning of the disease, and transfer their whole power on the extreme vessels of the surface of the body? If you should say that morbid matter, generally contagious, does it, how can you prove it?

If tonics and stimulants, which relieve and remove all diseases of debility, and the whole asthenic species, remove the effect of this matter too, of whatever kind it may be, and if all debilitants are certainly injurious, which is proved by reason, and confirmed by experience, and if, without the common noxious powers preceding, fevers never attack the system, nor consist in any other state of the body than such as is caused by the noxious powers

powers, is the effect of this morbid matter, in constituting a disease, or its operation to be supposed different, and not the same with the common noxious powers; *So ho, friend*, look close to the matter, consider for a moment the notion of spasm, not as yet discovered, divest yourself of all prejudice for a short time, make use for once of the reason which God gave you, which if you do, and make use of your own judgment, you never will be persuaded, that, that effect, which is the same, and one perfectly contrary to it can be the same.

There is nothing in nature, nothing in truth plainer, more certain or simple, than that all the symptoms of fevers properly so called, arise from noxious debilitating powers, whether they are general ones, viz. common to all fevers, or whether they be symptoms peculiar to each, consist in debility, and yeild to remedies that act by their stimulating. The matter causing fevers, if such there be, either gives
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the peculiar form of the disease alone, or acts altogether in the same manner in which the common noxious powers act; and to the effect of both, proper relief is administered by the same kind of action, and by the same powers, both before the disease and after, which is to be removed by remedies, which act equally extensive, by stimulating the whole system, as the noxious debilitating powers have done, having acted on the whole system, and having left debility as an effect, which effect is the consequence often of the operation of debilitating powers often applied, as *T.E.* to remove fevers, which is diametrically opposite, and clashes with the opinion of *spasm*. Therefore, if in this, as well as in the other class of diseases, no *spasm* existed before the disease, it cannot exist after it is constituted.

This opinion of *spasm* is further refuted by this, that the remedies are not supposed to act on the general system, in the intention of cure, and that these remedies have
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no general operation at all, nor does the intention of cure correspond with the cause of the disease ; on the contrary, all jar with all, each with each, and one with another. Of the noxious exciting powers, some are said to be sedatives, from the very beginning ; the effects of which are said to be both debility, spasm, and encreased action ; and in these they supposed the cause to consist.

In the method of cure, trifling attempts are made, first to remove the languor, afterwards by venesection in small quantity at a time, but long continued, and consequently very great in the whole ; and by purging or evacuants, spasm, forsooth, is said to be worn off at last, when the strength of life is entirely broke, and life tottering.

At last, a very small quantity of wine is ordered, and lately, physicians have administered opium at that period.

Where is the common connexion between all of these, or of each among themselves,

selves, or of one with another? How do they chime together, if we are to depend upon these, what agreement is there between them, as one derogates from our dependence on the other? if reason is to be looked to, what uniformity or method is there here, where things the most contrary to one another, are combined together, and the most discordant things adopted to the same principle?

Therefore, the opinion of spasm disagreeing with fact, and with reason, and with itself, is betrayed by the discordance of its parts, and is proved to be false, by the very arguments which are brought to defend it; one refuting, and, as if it were, cutting to pieces, with mutual antipathy and hatred the other.

But, over and above that, it disagrees with itself, with all fact and reason; it is repugnant to the state of predisposition, and false in every respect.

The spasmodic doctrine made no alteration at all on pathology, none in the method of cure, much less making every alteration in both.

The whole of this doctrine is the remains of other antiquated theories. First spasm, without any preceding condition, is taken up as a cause, which but very lately has been said to proceed from a state of debility, both in phlogistic diseases, and in fevers; which state of debility has been but obscurely proved *at last*, and as lately ill applied to phlogistic diseases, as well as to the doctrine of fevers.

This constituted spasm is supposed to encrease the action of the nervous power, &c. Here we have a three-fold cause, consisting of debility, spasm, and increased action, which is absurdly called re-action, (See Dr. Cullen's First Lines) various in effect, as inducing the proper symptoms of each of these parts; accustomed also to be removed by various remedies, not in

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the same order in which the cause advanced, debility obscurely, confusedly, and to no good use or purpose, altho' manifest by the clearest symptoms, is seen like the moon thro' the clouds, or is supposed to be seen, and only made mention of here, is introduced on the stage like a dumb character; Here, where you expect a great deal new, contrary to your expectation, no such things ^{are} ~~is~~ brought into practice.

The only state which is considered as the cause of the disease is spasm, and from thence encreased action.

The exciting powers, which both before the disease and after it, any man, not blinded by prejudice would see and admit to act on the whole body, and disuse the debility throughout the system.

I say, those noxious exciting powers are supposed to turn all their fury on the extreme vessels of the skin, and there, after constituting a spasm, to excite the nervous

power, much greater and much higher than what takes place in health.

That you may with more certainty understand, that tho' an evident debility, which has been proved, cannot be conceived from the spasmodic doctrine, there is no provision at all made for it, neither in your indications of cure, for they are many, nor in the remedies prescribed: certainly blood drawn in the beginning, then purging used in the course of the disease, and lastly as many glasses of wine and water, as bumpers of pure wine, which a man in health may take, is ordered in extreme debility, and given by degrees, and drop by drop, on the very verge of death, which tend not much to give vigour and remove debility.

Consequently the present opinion of spasm does not differ at all from the former, neither the one or the other differs from either; and in fact, the real difference between the one and the other, is only in
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this, that in the one debility is mentioned, but not in the other.

Why do you, who defend spasm, whoever you be, as placed in debility only in words; I say, whoever you are, why do you draw blood in the beginning of a fever? Is not it because you supposed an encreased irritation, or a greater action of the nervous power than in health? How do you know that so great an action takes place, or so great vigour? And that, that is diminished by venesection; whereas all the symptoms shew that the patients strength is broke and reduced. Is it because *Sydenham* applied no other pathology, no other method of cure, and that only in all diseases.

But if he, (who by discovering the nature and cure of phlogistic diseases, deserved well of medicine,) did not see other diseases proceeding from debility as a cause, and consequently applied no pathology or method of cure to them, was it

not your business, as well as his to make use of your reason, and supply the defects of that great man. If you read the doctrine I have already delivered, and consider from that, or any other source, that the powers, on which all the functions of life depend, deviating from that standard, which is necessary for sound health, sooner or later cause a predisposition to disease, and diseases, themselves ; and according as these powers encrease more or less, you would consequently grant, that predisposition to these diseases, the phlogistic consists in a degree of excess, in the power of life, and, that the diseases themselves consist in a still greater degree of the same powers.

Because by the instructions of *Sydenham*, you apply powers that shorten life, in order to re-establish health. Could not you conceive that the same powers may possibly be deficient, and sink below that same standard, which is necessary for health, and thus, constitute a predisposition to diseases of a quite contrary nature, and

and even these diseases themselves ; and could not you perceive that this predisposition consists in a certain degree of deficiency of the power of life, and that these diseases themselves consist in a higher degree of that deficiency ?

If life is injured by a too great quantity of the exciting powers, should not we reasonably suspect, that it may possibly be affected also by an opposite cause. This is evident indeed to common sense, but not to you.

Because *Sydenham*, in the peripneumony, with great propriety drew blood, but very improperly in a few other cases, and purged, you do the same in a typhus fever, and the same in a plague ; but you say, you very sparingly apply the former of the two remedies ; a very great deal of thanks is due to you for this ; you establish no difference in the thing itself, but some in the magnitude ; you observe, in the former diseases a phlogistic diathesis, and a great force of stimulating noxious powers ;
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in the latter diseases you observe the same irritation, and the same affections in kind, in the body. You draw your lancet against both. You equal the giant and the pygmy, by cutting off something from both, but somewhat less from the latter: with the same hook you cut down the luxuriant and pining crop of corn. If reason, however, well grounded, cannot prevail with you, will not certain and manifest facts, found in your ears the voice of reason? do not languor of body and mind, weakness of intellects, loathing of victuals, nausea, and vomiting, a feeble, small, irregular pulse, paleness, inability to perform voluntary motions, characterize fevers, and clearly distinguish them from phlogistic diseases?

In these species of diseases, are not all symptoms contrary to those of the other class? do these symptoms show no difference but that of magnitude? where are these indications of your boasted irritation; yes, you say quickness of pulse, dryness

ness of skin, and encreased heat in the same.

To suppose dryness of skin to proceed from spasm, is begging the question, for I have proved, page 147, &c.; that it depends on debility.

The heat in asthenic, is much less than in phlogistic diseases; very often it does not exceed the heat of a person in health, in the former, sometimes it is below it. This heat is unequal, in the beginning, it is encreased in its course, in the extremities afterwards diminished, and at last entirely extinguished; which marks are sufficient to distinguish it from phlogistic heat, which is always great, altho' the patient may seem to feel cold, and which is universal all over the body, and never *morbidity* diminished, while the type of the disease remains, much less every where extinguished.

Both depend on suppressed perspiration, but each from different causes. The phlogistic

gistic heat is constituted by a phlogistic diathesis, being greater on the skin, than on any other part of the body, but the heat that is called asthenic heat, arises from the blood not being propelled to the extreme vessels from debility. How that takes place I have partly said, and shall more at length hereafter. It is enough for me to mention, that this is the case at present.

Heat in both these species of diseases, is altogether a different affection, proceeding from a different origin, attended with different effects, and pointing out different indications, which is evident further from the other effects which attend both species of diseases.

All symptoms of abounding vigour attend a phlogistic heat; and all symptoms of deficient vigour attend an asthenic heat; for even the velocity of the pulse is not to be excepted. Which thing gives us the clearest assurance, that both heats depend on the general cause of the whole concurrence of symptoms, and each of its own. For,
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if any *Idiopathic* disease be an affection of the intire excitability, which is the same and indivisible all over the body, and is produced by either cause, to wit too much or deficient excitement, this truth must follow of course.

Therefore, whenever any, or either affection can be clearly seen, it is manifest that the affection alone, and no part of another affection, pervades the whole body. If that was not the case, excitability would consist of parts, one part admitting of too much, and another too deficient excitement. But the whole doctrine delivered in, is repugnant to this, by which it has been demonstrated, that wheresoever any one or more powers, whether noxious or salutary, and exciting too much or too little, acted on ~~in~~ any one part, that those powers, acted upon the whole system, with the inequality already mentioned, and encreased or diminished the excitability all over the body, in proportion as they were applied.

In order that your assurance of this opinion may be the better grounded, I challenge you to shew me any one of all the *general diseases*, wherein it appears, that some symptoms of a contrary indication are connected together, while most of the symptoms are either phlogistic or asthenic. If you can, I shall go over into your opinion, and forsake my own, but if you cannot, what sufficient reason can you assign for not coming into mine, and taking up this doctrine.

It must be granted, that that heat, which occurs in fevers, properly so called, does not proceed from irritation, but depends on a symptom of the general disease, viz. suppressed perspiration.

Which origin of heat is also repugnant to the celerity of the pulse, as will appear from the following very plain similitude.

Suppose a part of a very small vessel, to be capable to contain three globules of blood, and suppose two globules to fill it,
when

when in a state of health ; suppose three globules distending it, to constitute the phlogistic state, and one globule, to constitute the asthenic.

Inasmuch as the magnitude of contraction in the vessels, is correspondant to the quantity of blood, that distends and stimulates them, consequently the greatest force of contraction will be in the first case, less in the second, and least of all in the last.

The excitement corresponding to these, must observe the same proportion. Again, inasmuch as first the distention, and then the contraction, require sometime to perform both motions, therefore, the more blood that is taken in, first causing a distention and then a contraction of the vessels, which is to transmit it, will be longer in action ; therefore it is evident that the slower the distention and the slower must contraction be ; that is, it is manifest that the slowness of contraction will correspond to the quantity of blood.

This

This example being admitted, let the time of contraction in the case of three particles be as three, the contraction from two particles being as two ; that from one will be as one, which is very manifest.

If this be the case it is evident that the *celerity* of the pulse will be in proportion to the quickness of contraction, &c.

Hence the cause of the velocity of *pulses* in fevers is evident, for the less the quantity of blood in the system, the quicker will the *arteries* contract, and thus the *pulse* will be the quicker) and if we are to form a judgment of the magnitude of excitement from the *celerity* of the pulse, we will conclude that the quicker they are the less excitement there is in the system, and, the less stimulus causing excitement. Consequently, the celerity of the pulse in fevers is a proof of pure debility, and not of irritation or increased excitement, which, requires debilitating remedies.

This thing is confirmed by every consideration and observation of perfect health, and of disease of either species, and by good and bad health.

Thus in *boys* and *women*, in like manner in feeble persons of both *sex*, of every age, the pulse is quicker than in adults, and in strong men, in predisposition to asthenic diseases more than in *phlogistic* predisposition, or sound health, in asthenic diseases themselves, than in phlogistic diseases, in fine, in these too, when far advanced or near their termination, than in the commencement; I say in all these the pulse is quicker than in asthenic diseases, and that in proportion to the magnitude of debility.

Besides old people themselves, whose pulses are often slower than to seem to agree with this series of velocity of pulse, in proportion to their debility, the cause of which is not to be adverted to here; *nevertheless*, have a celerity of pulse increased in proportion to their increase of debility

debility, consequently in fevers as well as in all other diseases, and weak habits; debility, and not irritation, is the cause of the celerity of pulse.

If any one may ask me, as no irritation takes place in fevers, how comes it to pass that the common method of cure always has in view irritation alone, and not at all debility?

The reason is evident; the antiphlogistic method of cure was not discovered after observing supposed irritation in fevers, but after discovering the antiphlogistic method of cure, and properly applying it in phlogistic diseases, this apparent irritation, was discovered in fevers, so as to afford a probable cause why it should be applied in these diseases also; in a word the phlogistic nature of diseases alone, and the antiphlogistic method of cure being known, was applied to cure all diseases.

Thus blood is drawn, to draw off morbid matter, and to remove Spissitude, and
thus

thus in the name of *God*, to empty the vessels in fevers as well as in phlogistic diseases, which promiscuous method of cure, *Sydenham*, with no better reason than other physicians, but generally with more success, having avoided the other medical errors, but not understanding the nature of debility, practising with propriety in phlogistic, but very improperly in other affections, delivered it to those that were to prove *lentos*, and spasm. Wherein some, however, trifling reason, may be assigned for removing morbid matter or *lentos*, but no reason, nor the shadow of reason, nor the shadow of a shadow is assigned, or can be conceived in the mind of any man, that once considers the matter for removing spasm, or allaying irritation, which is supposed to be excited by spasm.

This pathology, and the venesection adopted to it, are the remains of the grossest dregs of dark errors. In the spasmodic doctrine, *vomits* are administered, with this intention chiefly, for this is their

mode of talking, to cause a continual nausea, in order to excite a *Diaphoresis* by this nausea, and, to wit, that by it, spasm should be removed; these are their words. In fact, an ample method of evacuation is applied, and the *Alexipharmic* method for expelling morbid matter, as they supposed in those days, is in fact brought back and enlarged. On the other hand, nothing follows that method of cure, whereby spasm can be believed, or conceived to be any how removed.

Shew me any one case which by so affecting the skin, as to seem to remove spasm, that it can be removed by a nausea; point out one medicine or remedy, whose manifest operation is to remove it, will you say Emetic tartar? you cannot; Nor would any one be hardy enough to do so.

By confessing that fevers must have a certain course, and a certain length of time, you admit that your remedy does nothing. What you consider as a spasm,

viz.

viz. dryness of skin, and paleness remains, until after the force of the disorder is increased, until the patients strength is altogether broken, and death in fine at hand, The relaxation of all the vessels, which is always in proportion to the magnitude of debility,* being increased to the highest degree, and the thinner part of the blood separating from the thicker, I say, until viscid sweat, and the intire blood itself, consisting of all its parts, pass out thro' every part of the body, which being the case as the fever continues, rages, and arrives at its extreme magnitude, you cannot but confess that the cause of the disease is not removed, but increased in proportion. What an unhappy confession is that, which allows that the only remedy, and which can scarcely be conceived, as useful against spasm, does not touch it, which betrays the whole cause in one single circumstance.* You deny, and justly deny, that febrile or morbid matter can be eliminated or corrected; for over and above the argument before urged, as that must be diffused throughout all the body

and throughout all the vessels, so all of it cannot by any means be supposed to be taken away along with a little of the fluids, which any species of purging would have affected, and it has been proved also that it cannot be changed, but then why do you make use of that very same remedy, which the former method of cure has pointed, if a slight sweat or moisture which you call *Diaphoresis* is the effect of its operation, which you must own yourself *it* must affect or not answer your intention? Is not this purging in every respect, and so much so, as the intention of making use of it is confessed, and allowed to be, to remove morbid matter? but you say it is less, because it does not arise to a proper sweat, but you may compare the smallness of that moisture with the length of time, and both, with the debility of the patient, and you will see it is large enough; but you'll say, this is not simple purging, but the medicine cannot be administered so as to stop short of vomiting; consequently a slight vomiting is now and then permitted, which continued for
many

many days, becomes in the end very plentiful evacuation, but the matter does not even rest here, there is something more.

The medicine is directed, in order to purge and deterge the *primæ viæ*, over and above that, a full vomiting is ordered once or twice in the beginning; the same remedy is ordered in quantity sufficient to pass the pylorus, and cause a stool, which however cautiously may be affected, when it continues for a length of time will become in the end a very considerable purging.

A threefold purging then being great, and in consequence of its long application, being greater, and often being consequent to a preceding venesection, and the great debility induced by the diseases I say, it must be very great, in consequence of all these circumstances conjoined; still by saying that this is very small, you either deceive yourself or others.

If all the force of a phlogistic disease; suppose a rheumatism, is reduced often by sweat in the space of twenty-four hours, which sweat may amount to four pounds, will not one third of that sweat being daily lost, for many days, by a more gentle method of evacuation, become in the end a much larger sum? and if all evacuation acts by debilitating, which is a fact confirmed, and which you can't yourself deny, will not that debility which your remedy causes, threaten the most fatal consequence to that patient, whom, the force of the disease has spontaneously brought to extreme debility? that this is the case, who can be ignorant?

One course of purging downwards by a large dose of Sal. Glaub. is often sufficient for removing a phlogistic disease, and frequently of inducing a fit of the gout, which hereafter will be proved to be a disease of indirect debility; which circumstance points out, by a very clear proof, how far this purging is effectual to diminish excitement. How powerful is the same, as
a cause

a cause of debility, is in the most clear manner confirmed by its operation which is next to venesection, as a remedy of a phlogistic diathesis; and to the same belongs also that looseness of the bowels which makes all mankind weak.

The same things are to be said of sweat, which is a powerful remedy against phlogistic diseases, whose use is only excepted in the commencement of them, when they are in their greatest violence, where the magnitude of excitement is unable to bear the stimulus which attends such habits, and is absent from strong ones.

The operation of vomiting is not unlike this kind of purging; is more seldom used in phlogistic diseases, because a sufficient quantity of the fluids, whereby the quantity of blood may be diminished is not easily taken away by this evacuation; but in every other respect it would be equally serviceable.

A medicine stopping short of vomiting, and only exciting a nausea and causing moisture and sweat on the whole skin, proves its extensive powers of debilitating the body, and relaxing all the vessels, especially the extreme ones. Vomiting also attends feeble patients, with other discharges too; so that the chief and perpetual symptoms of diseases of pure debility, such as the *Gout*, *Dyspepsia*, *Fevers*, and the plague itself, are nausea, vomiting, and loathing of victuals, which depend on the same state, and differ only, as every one knows, in the magnitude of the affection. See what must happen to you in a nausea, do not all the actions of the mind and body seem oppressed, sensation diminished, and almost extinguished, and you to be distant scarce a hairs breadth from non-existence? Consider what is life, is it not manifest that more of it exists in you when free from diseases, and even in diseases of a slight kind, than in the more powerful; as all your actions, and your quantity of life is in the same proportion and the less life you have, the more languid

languid they are. Must not the above truths be evident ? In perfect sound health, and also thro' all the different stages of predisposition to phlogistic diseases, until a proper disease comes on, altho' you exclude the state of disease, which, when moderate, should not be excluded ; are all the other actions of the body as well as of the stomach in a sound and perfect state ?

When does a hungry stomach vomit, nauseate, or lothe victuals ? For a man in perfect health, who has a vigorous habit without disease, nay, does not it desire victuals ?

Then are not all feeble people, such as those predisposed to asthenic diseases liable to some of the foregoing affections, and when really attacked with those diseases, when are not they affected with all these symptoms ?

What is a *dyspepsia* ? What a *gout* ? but diseases chiefly arising from these injuries ? Is the stomach ever well in fevers

or in any disease of debility? as well as in a different state of the body.

What then is a perpetual symptom of debility? An imitation of it cannot contribute to strength, which is our only intention here to restore weight with yourself, that relaxation of all the excreting vessels, which is the effects of all evacuation. What then is their state in perfectly sound health? Is not it intermediate between a morbid density and morbid relaxation? What is the state of the same vessels in every phlogistic diathesis, whether great, moderate, or small, from the same narrow line of health to a state of indirect debility, proceeding from too great excitement? I say what is their state, except greater excitement than in any other state, and a density corresponding thereto? In a word a phlogistic diathesis occupying the extreme vessels.

On the other hand, what is the state of these vessels in an asthenic diathesis, from the boundary of sound health thro' all different degrees, reaching to disorders of
extreme

extreme debility, whether direct or indirect? Is it not a state of too small excitement, which, ^{it} is commonly called, and of a relaxation corresponding thereto, in a word, is not it an asthenic diathesis occupying every where the extreme vessels? Do not nausea, and often recurring vomiting, a loose belly, propensity to sweat, caused especially by the smallest effort of motion, or any moderate stimulus prove their state to be such?

If, of all the extreme vessels, these alone that pass to the skin, and not even these alone, are dry. Does not the weakness of the heart easily explain that matter? And altho' in consequence of the debility not being diminished, but encreased, the sweat afterwards passes out thro' all the pores of the skin, without any very sensible cause.

Do not their diameters, encreasing in proportion to the debility, and their diminution of action, further augmented, and the thinner part of the blood separating from the thicker, arising from this

diminished action, and flowing out where a passage is afforded, explain this difference, which may be apparent, but not real? Does not your imitation of this manifest debility, which according to your own confession, eliminates no morbid matter; in like manner encrease the manifest debility of the disease, and redouble its bad effects? You suppose that you keep the bowels easy, and prevent an irritation, arising from your constipation, and determine the antispasmodic power of your medicine to the skin, and all this by gentle sweating.

If you affect all this by evacuation, you exceed the purging of the *Alexipharmic Physicians*, who are now exploded, and justly; you do more harm, you do not remove the spasm, which I have demonstrated to be imaginary, and you encrease the amount of the debility in proportion to the quantity of purging you apply. On the other hand, if the effect of the purgative, in consequence of debility, or defective stimuli, necessary to keep up its operation,

operation, does not act with the full power of a purgative, and tho' the quantity of fluids lost, be less debilitating on that account, while, nevertheless, it debilitates in part this way, at the same time a perpetual nausea, and a perpetual resolution of the extreme vessels being long kept up, cannot but greatly debilitate, and encrease the weakness resulting from the disease.

Of all purgative operations, and such others as reduce the power of excitement, what plague? What curse of *Heaven*, can be more severe than you and your method of cure? To you and your purgative method of cure, are owing *Colliquative Diarrhæas*, *Colloquative* sweats, hæmorrhages from different parts of the body, extraordinary frequency of pulse, which you impute to imaginary irritation, the strength of the patient entirely broken, and inevitable death.

No vehement purging downwards, such as you condemn, ^{is} equal or adequate to the
produc-

production of destruction, equal to yours. As you have borrowed from the *Alexipharmics*, both whose pathology and method of cure you pretend to explode, such a method of cure, so you renew your purgative method, and add also a far worse one.

You have taken from others the antiphlogistic method of cure, which you apply in the whole course of your *Fevers*, and have not derived it from your own theory whence nothing spontaneously nothing consistent flows. During the whole course of *Fevers* you add abstinence to the antiphlogistic regimen. As if it alone was not sufficient to do harm, which was ordered with propriety in phlogistic diseases, as being most efficacious for diminishing the most powerful of the noxious powers, to wit, an abundance of blood in the vessels ; so, on that very account, it is most destructive in *Fevers*, in which treatment the unhappy phlogistic pathology being again added to the spasmodic doctrine, like leaven converts every thing
into

into its own nature: I say the phlogistic pathology bringing along with it the opposite method of cure, like fate, with its Iron nail, taking also along with it, as a companion, that provident and wise intelligence of the mind viz. the *vis medicatrix* has proved destructive in such diseases of debility. In which disease victuals, and some form of drink, strong forms of which many are accustomed to, are necessary for the support of life. Abstinence from food for a few days is sufficient to kill any person. If such abstinence puts an end to the lives of the robust, how will not it much more destroy the weak, labouring under extreme languor, approaching to death, and hasten on their dissolution? Common sense tells us so. Altho this provident intelligence prohibits the administration of victuals, because the patient does not desire it, at least reason recommends the administration of alible matter in a liquid form, and consequently more easy of concoction, and fitter for the support of life; and experience proves the propriety of such administration,

ministration, both which direct us to administer strong drink besides, and in somewhat a larger quantity, in order to supply the defect of victuals, because, these being taken in too small quantity, are insufficient for supporting the system.

I say, then we should follow reason and experience, which establish this only rule, that as much of both may be given as the patient can take without inconvenience.

If in fact, you should reject, as you seem to do, the Ignorance of Stalh, By what reason, by what practice, will you defend yourself? you fear irritation too, and lurk behind the shield of *Sydenham*, fearing to advance openly, and defend yourself from death with your own, thro' cunning and consciousness of your own weakness. But your irritation has been refuted, and that great man has been proved to have been mistaken in that part. Which author, in some other diseases very improperly, as also in proper *Fevers* used your method of cure. Where-

as irritation cannot be proved. You'll find no protection here, or if protected, you will not escape, as there is no necessity of admitting the error of any man as a truth for your sake.

Now, being forsaken by *Sydenham*, and soon to be delivered up to his adversary*, you will run away to the Camp of *Stalh*, and say, that it is better to give the patient what he does not choose, rather than what he chooses to take; nor will even this be granted you, reduced to your last shifts, as being proved false both by reason and experience.

Nor should that quantity of victuals and drink, during the whole course of the disease, to its *termination*, which can be taken in by the patient, and be of service to him, be kept from him, because he does not desire such, and after its termination be given him, because he desires it.

In fine, why do you reason thus so inconsistent with yourself, and one time confess that you are of this or that party ; one time you confidently deny it, another time endeavour to conceal your self, another time, reluctantly and obliged, betray yourself always as far ; for thus you can prevail by your credit, claiming to yourself the founding title of a discoverer, altho' you turn yourself into every shape, and in obscure windings, and fringed mazes of words, void of substance, by chanting out like the priestesses of *Apollo*, by putting off proofs, and by promising to prove things that you never will do ; by relating falsehoods, and the opinions of others, but not detected to be so, because obsolete and out of memory, assuming as your own, the opinions of others, and by keeping silent, as it were, thro' modesty, your pretty little contemplations of the fancy, to explain all the phenomena of nature, you milk the thoughtless and ignorant, you impose upon them, you deceive them, you stimulate them, and fire them with a desire and admiration, which are inferior

to the endeavours you make ; nevertheless, you have proved nothing of your own in the doctrine, which is called spasmodic by name, but nothing in fact.

On the other hand, you will see all your works, which are stolen from those of others, different parts from different authors, and consequently altogether inconsistent, which you yourself cannot be a stranger to. I say, you will see others also discover your shift, with a pain of mind that shall not be mentioned.

As the defence of spasm was only, and feebly made by a man, viz. *Hoffman*, who, as it were, forsook its futility and attempted its defence but weakly, which is done away already by this doctrine which proves distention, which is so necessary to constitute spasm, to be wanting in it, and a contrary state to exist ; and also as it admits of no predisposition, and as the method of cure differs intirely with the idea of the disease, which only is proceeded upon agreeable to former errors ; and as

this doctrine, in its late supposed improved state, only rests on the ipse dixit of a certain teacher, is it not to be expunged from the science of medicine?

Spasm is so far from being a real affection, and the remedies applied to remove it, are so far from doing, or contributing any how to the restoration of health, that on the contrary each encrease the disease, and all certain destruction.

A person in a *Fever*, after first loosing blood, can with difficulty, be snatched from the Jaws of death; but with greater difficulty still, when worn down by various purging, long continued; but with greater still, when impaired, during the whole course of the disease, by famine; and when the stimulus of proper drink, or any other necessary stimulus is denied him.

The experiment which you have so often made on others, without knowing the event before hand, you should make on yourself; for you will confess at least,
from

from a regard to decorum that the life of man is not a trifling affair. Be first exhausted by every debilitating power, such as anxiety of mind, hunger, a subduction of the usual stimulus of wine, a loss of blood, and other humours, immoderate venery, languor, the result of a preceding disease, but still be not affected with what may be called properly a disease; let contagion not be applied to you, least your state may appear not at all better than a febrile one; being in this situation, then shut yourself up in your room, and confine yourself to your bed closely, prohibit yourself from all victuals and drink, except watery, for ten or twelve days or more, after taking away eight or ten ounces of blood from you in the beginning; during all this time, in consequence of taking your medicine, be sometimes nauseated, be sometimes vomited, sometimes purged downwards, sweat always, or at least be moist all over your body, except when every stimulus, whereby the prostrated power of life may be a little excited fails.

In

In fine, if it be the winter season, and the country very cold, take off the quilt and expose yourself constantly to cold, ~~in~~ *fine*, let somebody wet your lips, accustomed to strong wine, and strong drink daily. I say, let somebody wet your lips, for then you will not be able to do it yourself; let one or two sensible people, for the more ignorant they are of medicine, such as you practice, they will be better judges and witnesses. I say let them attend to this experiment, and such persons will witness that your funeral was the last of all the funerals caused by such method of cure.

As the certain destruction, produced by the spasmodic doctrine is alone a sufficient proof to overturn it; so, over and above the force of the arguments already mentioned, each of which, and much more, all tend to the same purpose; this added, confirms the same opinion with the greatest weight; and while the same method of cure, tho' none may be shown more efficacious among all the plagues con-
joined,

joined, that have afflicted the life of man, can it appear to deserve a preference before an efficacious method at length discovered, and proved both by reason and experience? compare it with the imaginary cause of *Fevers*, which spasm, and its equally imaginary method of cure, the antiphlogistic to a fault; I say, compare the febrile cause and cure of them with what this doctrine advances, and the absurdity, &c. will easily appear. Febrile spasm is nothing else than an asthenic diathesis, somewhat more vehement in the skin than internally; encreasing it there, more by the power of heat, or the direct debilitating operation of cold, lessening the perspiration, on account of the debility of the heart and arteries, which is common to these with the rest of the system afterwards when this obstructed perspiration encreasing thro' all the vessels, enlarging their diameters, and by means of their inertness, suffering the thinner part of the blood to separate from the thicker, it encreases the excretion of the skin beyond measure.

Fevers,

Fevers, proceeding from this cause, are affections contained in no one part wider or narrower, internal or external, but diffused all over the system, such as you may suppose to arise from the noxious powers acting on the whole body.

The intention of cure should be equally general, and directed to no one part, but extended to the whole body, in order that the excitement, diminished every where, should be increased proportionally.

The remedies affecting this intention, are such stimulants chiefly as do not load the feeble stomach, unable to bear gross food, and equally to affect the excitability throughout; which doctrine agrees in every respect with every part of it. The noxious exciting powers, the cause and the remedies in all things, are the same here, as in other diseases of debility, nor does the contagious matter certainly taken into the system, and retained therein during the course of the disease, and afterwards eliminated thro' all the

the excreting vessels afford any thing new, but that it may give the specific form to the disease and encrease the effect of the common noxious powers, viz. debility, or in the intention of cure but that it must be supposed to require sometime to be eliminated, and consequently must need a free and open perspiration which is effected by the common stimulating powers and not by any peculiar sudorifics.

How far this doctrine differs from other theories, and also from the spasmodic is easy to be seen. The spasmodic is liable to all the objections stated, and also to this, that the spasm, which is supposed to be the proximate cause of *Fever*, cannot be extended to the other diseases, but each of these must be supposed to have a cause peculiar to itself; and thus those diseases which proceeded from the same cause, and, are attended with the same symptoms, if you except a few of little moment, and which are removed by the same powers, and cannot therefore be, B b different

different, which would be contrary to the simplicity of the laws by which nature acts.

For if the same exciting powers, create diseases, and that certain remedies remove them, which is true, these diseases must proceed from the same cause.

But further, this doctrine is not confined to a few diseases, so as to exclude the greater part, nor even to all diseases so as to exclude predisposition, but applies altogether to the nature of all diseases of both species, and their corresponding predispositions. Thus for instance, the method of cure which it prescribes for *Fevers*, is sufficient to remove and obviate all diseases of debility, as it differs in no other respect than that of magnitude in the powers applied, which must be varied in proportion to the magnitude of the disease; In like manner, the method of cure in peripneumony or in any other phlogistic disease is applicable to all diseases, and all predisposition of the same species, regard being had, always, to the difference

difference of magnitude, in order to effect a general cure.

Of CONTRACTION and its EFFECTS.

THE entire and powerful faculty of self contraction, with which the muscular fibres are endowed, as it depends on excitement, so it is proportioned to its magnitude. This is attested and confirmed by all the operations of sound and bad health, and also by the operation of all the exciting powers and remedies. The force and facility of motion is one and the self same thing. We must judge from the reality and not from the appearance of things ; consequently, *Trembling Convulsions*, and every affection comprized under them are to be imputed to debility. The noxious power here exciting is a too violent stimulus for the part.

The magnitude of contraction, causing spasm, is not to be excepted. Which is

an action rather of continuance and deficient, than a great and just one. And how great soever the contraction is, it depends on a local stimulus of distention, or something tending to the same, and consists in a diminished excitement, is destitute of strength, and is removed by stimulant remedies. Behold the thing it self, and the true account of it !

The magnitude of contraction, in as much as it is an entire action, so it is joined with strength.* Hence the density of the contractile fibres, considered as simple solids, is certainly discovered to follow the measure of contraction.

Excitement therefore is the cause of density. The greater the excitement is the more encreased, it renders the same. This is evident from the highest degree of strength, and its correspondent density, that which is perceived in the hour of death, in death itself, and after death, in that debility corresponding with that laxity through all the middle degrees, if

I may

I may so call it. That the thing is so, is clear from the weakness of the same fibres, when dead, and from their strength when alive, of which difference excitement is certainly the sole cause.

Hence the cavities of the vessels throughout their various tracts in the system, decrease in the strong and rigid state, and in weakness and infirmity increase. This is the cause of suppressed or diminished perspiration.

*The EFFECT of both DIATHESIS and of
SOUND HEALTH itself.*

THE common effect of the phlogistic noxious powers, in affecting the actions, is, first to encrease them, then partly to diminish them, but never by debilitating, and partly to disturb them. The effect of the asthenic is to diminish the said actions, but so that sometimes they falsely put on the appearance of encrease.

A just

A just excitement, if possible to be kept up continually, would make mankind enjoy perpetual health. But two things are hinderances to this, (viz.) For such is the force of a phlogistic diathesis; that, by consuming the sum of excitability given to each one, along with his existence sooner than common; it shortens life, often by the interposition of diseases, and brings on death sooner or later, according to its degree of magnitude. This is one cause of mans mortality.

An asthenic treatment is also hurtful, by not affording enough of excitement necessary for health; and thus inducing a state of debility bordering on death. This is the other road that leads to mortality. But to exchange diathesis, is also a means towards bringing on diseases, and death. Either diathesis, may be turned to its reverse by the application of the noxious powers, as remedies in too great a degree, whether by chance, or through men's inadvertence or design; by thus applying an opposite remedy the disease is certain

certain to return to the point from whence it set off. This observation will be found of the greatest consequence in cure, as well of the predispositions, to diseases as of the diseases themselves. To illustrate which, a thing not foreign to the subject; examples will be afterwards applied. An hydrothorax, or dropsy in the breast; following a peripneumony is an illustration of the change of a phlogistic into an asthenic diathesis. Thus again, by a too great use of stimulants to change an asthenic into a phlogistic affection, as to exchange the gout for a violent cough. Catarrh, Cynanche tonsillaris, &c. is the consequence of too great an application of proper remedies sometimes.

It is clear from what has been said, that life is a forced state, that animals at every moment are tending to dissolution; that they are guarded from this with difficulty, and only by other powers, but at last from necessity in part compelled to yield to death. Hence we can easily explain

explain the curse first laid on man, “ The day that thou shalt begin to live, on it thou shalt die.” That is, without constant care, without labour and sweat of the brow, the exciting powers being either not at all or improperly applied, death will instantly surround him, &c.

END OF THE FIRST VOL.

A N
A C C O U N T
O F T H E
V A R I O U S S Y S T E M S

O F *John Brown*
M E D I C I N E,

F R O M T H E D A Y S O F H I P O C R A T E S,

T O T H E P R E S E N T T I M E :

C O L L E C T E D F R O M T H E B E S T

L A T I N, F R E N C H A N D E N G L I S H A U T H O R S,

P A R T I C U L A R L Y

F R O M T H E W O R K S O F J O H N B R O W N, M. D.
L E C T U R E R O N M E D I C I N E, A N D P R E S I D E N T O F T H E R O Y A L M E D I C A L
S O C I E T Y, I N E D I N B U R G H, & C.

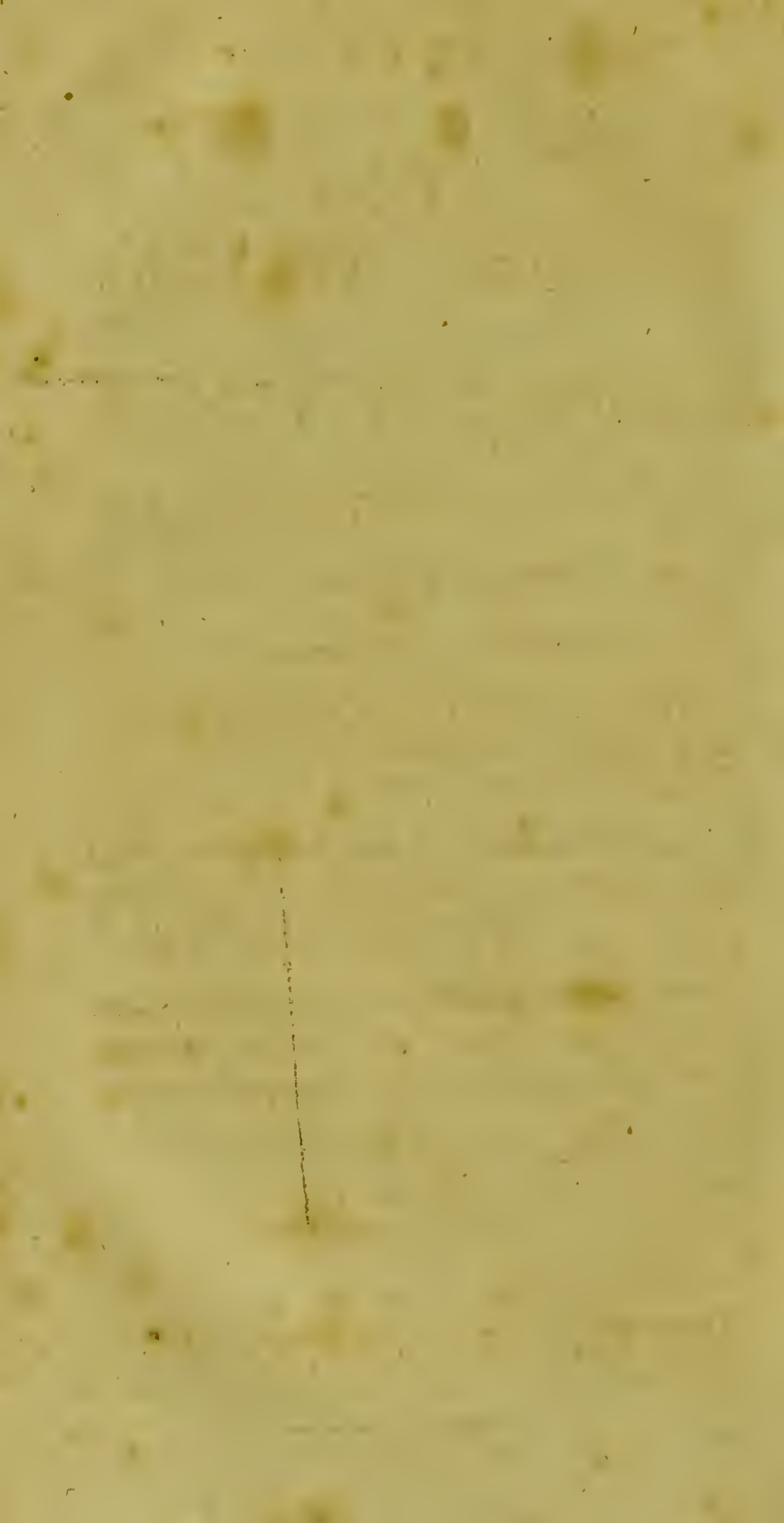
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A N D M O S T O F T H E P R I N C I P A L B O O K S E L L E R S I N G R E A T B R I T A I N A N D
I R E L A N D.

M, DCC, LXXXVIII.



THE
VARIOUS SYSTEMS
OF
MEDICINE.

On EXCITABILITY.

CONCERNING the nature of *excitability*, or how it is affected by the exciting powers, we are entirely ignorant. Be it what it will, some of it, or some force of it, is given to every one at the same instant with life. If we consider the power or abundance of it, when given, in some animals and different in others, the question becomes quite of another nature. Partly on account of the uncertain nature of the thing, and partly for want of common language and the novelty also of this doctrine, of which we shall treat afterwards in different places, one is the reason why the *excitability* should abound

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when little stimulus is applied, and how the same *excitability* should be deficient, exhausted, and consumed, after the same stimulus is applied with too great vehemence, or otherwise. But let us here, as well as in other places, stand firm to truth. The deceitful question concerning causes, being almost incomprehensible, that venom-ed snake of *Philosophy* must be cautiously shunned and avoided. Let no one therefore pry into the nature of the *excitability*, from what has been lately said, whether it be matter or not, and thus may be either encreased or diminished; or whether it should be defined a modification of matter, which at one time is in its bloom and vigour, at another, diminished and decayed; nor will even this hidden question be come at, or interpreted, which has always almost been done to the greatest detriment of science.

As some *excitability*, however small; is necessary for a living system, nor can the action of exciting powers either in a stronger or weaker degree be ever wanting,

ing, consistent with life; in all these exciting powers, therefore, either a greater or less, a too much or deficient, or an adequate force, must be conceived to exist.

Superfluity of blood is too great a stimulus, and for that reason excites diseases that have a too great stimulus for their cause; yet the want of blood, altho' it debilitates, and brings on disorders consisting in debility, must be understood to stimulate, but only in proportion to the scarcity of it. This doctrine is supported from the effects of the operation of all the other exciting powers; unless poisons, perhaps and contagions may seem to merit an exception. But poisons either do not give rise to common diseases, of which we are here treating, or if they do, it is by the same mode of operation, by which the other exciting powers act.

Some diseases, consisting in too great a stimulus or in too great debility, are the result of contagions. Both of which diseases, as not only contagions, but other common

poisons operating as stimulants may create, I say ; since the effects of both are the same, they must both have the same mode of operation. Moreover, that contagions are stronger than the more known poisons, will be afterwards demonstrated. To this we may add that no remedies remove diseases, brought on by contagions, besides those which cure diseases, depending on the operation of the common noxious powers. In fine, the great *debilitating* power, in some contagions, does not prove a different mode of operation, more than an equal or greater *debility*, arising from different degrees of cold, proves it not always to be a debilitant.

Since the common powers alone, produce every thing necessary for life, and their operation alone is stimulant ; therefore all necessaries of life, whether they procure good or bad health, consist in a stimulus and in nothing else.

Excitement, the effect of the powers which are the cause of life, may arise to
such

such bounds as to destroy it ; when raised to a proper degree, produces good health ; if carried higher, propensity to diseases, or such themselves ; if the same powers are applied in too low a degree, diseases consisting in debility will be the consequence also.

The nature of this *excitability* and *excitement* is such, that the weaker the powers have operated, or the less the stimulus has been, the more the *excitability* is redundant ; and the more the stimuli have been applied, the more exhausted will be the *excitability* ; the stimulus applied to the former, will produce great *excitement*, but if to the latter, the contrary must take place. To illustrate this, a boy or a sober man, by a small stimulus, unaccustomed to such, soon obtains as great an *excitement*, as they can well bear. Grown up men as well as drunkards are examples of this also. All the powers have the same effect, causing little *excitement* in the former case, and a great deal in the latter.

As *excitement* arises from the stimulus of exciting powers, accompanied with *excitability*, so the proportion is found betwixt the stimulus and *excitability*; the middle stimulus, affecting the middle or half consumed *excitability*, causes the greatest *excitement*; which *excitement* decreases, in proportion to the magnitude of the stimulus, or in proportion to the augmentation of the *excitability*, more than what is sufficient. Hence follows the vigour of youth, and the weakness of childhood, and old age. Hence arises that vigour, from proper application of the necessaries of life, to people who have lived too low.

The truth of this is so clear, that each age has its peculiar state of power, and each state its peculiar degree of vigour; also in child-hood, on account of the *excitability* being great, in order to preserve health, a small degree of stimuli are necessary; but if too little be applied, it becomes languid and falls away; or if too much are applied, it becomes weary, fatigued,

fatigued, &c. and in the end is quite overcome. Old age, and that infirmity concomitant with it, arises from a deficiency of *excitability*, and requires a degree of stimuli proportionate to the deficiency, &c. if applied too sparingly, life languishes; and if in too great quantity, it is quite overcome. Hence the more copious the *excitability*, the easier it is fatiated, or the less stimulus it can bear. On the contrary, the more the *excitability* is worn, the more stimuli it admits of, until at last, when it is almost intirely worn out, the least stimulus must necessarily extinguish the fire of life.

But there are certain limits within which these come to pass. Thus, as has been said, life is terminated two ways; the one of which is by exhausted *excitability*, which may be effected by the force of violent stimuli, a short time continued, or by more moderate stimulants a long time applied. Both cases tend to the same end; since the greatness of the stimulus compensates

penfates for its fhort duration, and the long continuance corresponds to its mediocrity. Sudden death is a confequence of the former, if the fyftem is predifpofed to difeafe particularly, but the latter affects the fame more flowly; and altho', even the moft proper meafure of *excitement* fhould be kept up, yet death at laft, tho' later muft inevitably be the confequence.

Any one power is capable of affecting this; but by the application of more of the powers, &c. the end will fooner be accomplished.

Drunkenefs, or its attendants, fweating, langour, heat, either alone, or fucceeding, cold, lownefs of mind, after deep thought, or violent exertions of the mental faculties, and in fine fleep; I fay, all thefe are the refult of too great ftimuli, which exhaust the *excitability*. The weaknefs concomitant to old age, and the danger of difeafes of this fort, together with the very difeafes themfelves always
are

are the consequence of the application of exciting powers in different degrees; and the consequence is death either way. A stimulus long applied, often loses its effect; in which case, a fresh one answers the end for *excitement*. Thus, strong liquor induces sleep; after a hearty dinner, very often; or produces the same effect after fatigue, either of body or mind; but a still higher stimulus will remove the effect, as opium, &c. and if in this condition, a beloved object should retire, and there is any tolerable hopes of regaining her, the consequence will be the removal of the effects, produced by the former stimulus. A friend will often rouse us by some agreeable discourse, or the reverse.

To repair the *excitability*, long operated upon by various stimuli, is an affair very arduous to undertake, because the more they have had recourse to such, the less effect can be produced by new ones, by the operation of which the languishing *excitement* should be roused up; and as the *excitability* exhausted by one stimulus,

by wine for example, may destroy life, with more certainty, will the too great application of a greater number produce the same effect.

Which case is the more dangerous, because the loss of that *excitability*, after it has attained a certain degree, is at last irreparable; and nothing equal to it now remains, to produce proper excitement, except the very things which produce the disease, viz. powerful stimulus.

In fine, such is the nature of this loss, that unless some proper application be made for the preservation of life, and such as is suitable to nature, death will immediately be the consequence. The difficulty of curing drunkards, gluttons, and those labouring under diseases arising from similar effects, are sufficient proofs of the reality of what has been now advanced.

Thus, *excitability* impaired by stimuli, induces that degree of weakness which is properly

properly called *indirect debility*, which is not the consequence of a deficiency of stimuli, but of too great a quantity of the same. In the whole progress to *indirect debility*, the first effect of each stimulus is greater than the next following, and this diminution is regular in retrogradation, until no force of stimuli will produce any effect.

The second condition, finishing *excitement*, is the exciting powers applied in too low a degree, and therefore not adequate to produce sufficient *excitement*; which case, as it arises from a deficiency of stimuli, and a superfluity of *excitability*, must be distinguished, for the sake of utility, from the other case, where there is laid before you the deficiency of *excitability*, by the force of the stimulus applied to the system. All the stimuli may be so deficiently applied as to bring on this state, which is denominated *direct debility*. They all, therefore, tend to confirm and illustrate this proportion.

Here the *excitability* abounds, and because the stimuli are withdrawn it is not exhausted. Thus in a cold bath, by a deficiency in point of heat, and therefore in the sum of the whole stimuli, the excitement is lessened, and the *excitability*, as not being operated on by the stimulus, encreases. The same is evident in ill fed people, and water drinkers, and in the infirm, the thoughtless and indolent.

As the *excitement* decreases in proportion as the *excitability* encreases, so it may be carried to such a pitch as to produce death, of which, cold, hunger, loss of fluids, a sedentary life, grief and anxiety of mind, all bear testimony. But if cold sometimes seems to stimulate, it does not so merely as a stimulus, but either by diminishing too great heat, and reducing it to a proper standard, or by opening a free communication for the air to the system, or by relieving the *excitability*, acted on too much by a too great stimulus. In like manner, if the affections just mentioned

oned assist the operation of the other exciting powers, they effect this by a similar mode of operation.

One stimulus often compensates for the want of another, and in proportion to the magnitude of the *excitability*, &c. and will answer its end; thus joyful news and chearful company helps to support those that are poorly fed; a draught of good liquor lulls the unexercised, either in body or mind; and opium in case of necessity will effect the same. *Bacchus* is useful in the absence of *Venus*, and *vice versa*; either of these supplying the place of the other, and thus driving away dullness. The same is evident, in the use of those stimuli, desired more through custom than nature; thus the want of snuff is supplied by chewing tobacco; and the latter by the same vegetable converted into smoke.

Moreover, some functions may be so impaired for a time, as to prevent a flow
of

of some accustomed natural stimulus ; when others less natural, &c. being substituted, keep up life, till such time as the functions are restored, and the more natural stimuli brought back, accompanied with health, and vigour of body and mind. As too great *excitability*, the consequence of too little application of a stimulus, may be diminished throughout all its degrees, as it were, by one stimulus, &c. from the least to its greatest extent, and thus danger guarded against, until it be brought to that state which constitutes sound health ; so the more the *excitability* abounds ; that is, the less it is acted on by stimuli, the less must the stimulus be at first applied ; and the *excitability* may arrive at such a height, as to admit of no stimulus, and consequently no *excitement* can be kept up,

The use of any debilitating power, both illustrates and confirms this, as may be seen in the examples of cold, hunger, thirst, and also in *Fevers*.

This

This superabundant *excitability* passes so precipitately on to death, that the only method of guarding against such a consequence, or supporting life, is to attack its progress, first by a very little stimulus, not much greater than that which was the cause of it; then, after having lessened part of its superfluity, we may use a little stronger; and, in proportion as it is diminished, to proceed with a stronger still; and that whatever is superfluous may be removed, until we obtain that state of mediocrity, which constitutes health, which state is diametrically opposite, either to that debility, arising from the *excitability* being worn out, or to the state that arises from too redundant *excitability*, being a middle state between too extremes. Thus, the famished are not to be recovered by a full diet at first, nor the long thirsty by too much drink given immediately, but by little and little, and increased by degrees. A person stiff with cold, is to be warmed by the same rules. Joyful tidings are only to be made

known

known gradually to the heart broken. The loss of the battle of Cannæ, was told to the matrons by those who escaped, first, as a doubtful report, then as a little more certain; but at last, as surpassing all doubt, were told the whole event, after they had been strengthened by stimulants, and refreshed with Falernian wine. More stimulus should be used in the beginning, than at the end, in *Fevers* of the lower kind than in the higher, and in diseases of weakness than in *Fevers*; but we must begin and continue on as we have here already mentioned.

For since all life consists in a stimulus, and as either the superabundance or scarcity of it, gives rise to diseases, and that in proportion to such; thus the remedies of both are to be proportioned to such, and a great force of stimuli is to be applied to the great defect of *excitability*, and such a proportion to the superabundant *excitability*, as may reduce it to the standard of health.

Debility,

Debility, arising from the defect of stimulants, is called *direct*, because it is the consequence of the application of the necessaries of life, in too small a degree.

During the whole course of *direct debility*, by diminishing the stimulus, at last the *excitability* will be so increased as to admit of no *excitement*. Which, therefore, should never be so treated, or death must be the consequence, nor should we ever add a *direct* disease to an indirect, or increase any species of debility, from a vain hope of advantage, derived from the application of an unaccustomed stimulus.

O F T H E

PHLOGISTIC DIATHESIS.

OF all the powers which tend to create either a Phlogistic Diathesis, predisposition to Phlogistic Disease, or the diseases themselves, heat is one of the greatest. Thus that very same power, the most necessary to the growth, existence, and well being of animals and vegetables, under certain circumstances, becomes the most hurtful. Applied in a moderate degree, proper *excitement* will be the consequence; in a higher degree a Phlogistic Diathesis, predisposition to disease, or disease must take place; but if in a violent measure, that disorder will follow that is denominated indirect debility.

Heat,

Heat, acting on a living system, is generally applied more to the surface than the inward parts; hence its operation is to excite the extreme vessels, so as to diminish their diameters, which it often does to such a degree, as to almost close them up, and prevent perspiration, which greatly increases the disorder: Hence in the measles and small pox, the irritating matter is retained, &c. which greatly increases the *excitement*, in the surface. This power is equally hurtful in all Phlogistic diseases.

As cold can constrict the particles of a living animal, after the same manner that it does inanimate matter; so this constriction, because the degree of cold which is adequate to affect it, cannot be long supported by a living system, cannot increase; I say, that constriction cannot increase by length of time, or continue, after the cause is removed, without destroying life.

The perspiration suppressed in Phlogistic diseases, and the symptoms attending this obstructed perspiration, which are commonly supposed to proceed from spasm, or cold acting by constriction, are nothing else than the common Diathesis increased in the skin.

The stimulus of heat, and the other exciting powers, act more powerfully after the operation of cold, for reasons to be mentioned.*

The *debilitating* effect of cold is so increased by moisture, as to prove often noxious, and always threatens to be so, if its effects are not properly and speedily obviated; but always is hurtful in a Phlogistic Diathesis, by increasing the effect of the succeeding stimuli; and in the contrary Diathesis, it injures by continuing its *debilitating* power. The only sort of food which is in danger of stimulating too much, is flesh meat and all kind of aliment prepared from such animal food,

as

as also meat too salt and too hard, especially when it tends to a state of putrefaction. This stimulus, which reaches the whole system, is therefore called a diffusible one, so, it operates on the stomach, somewhat more than on any other equal part of the body. Condiments have the same efficacy, a small portion of which on account of their violent power of stimulating, will be sufficient.

Spirituous and vinous liquors, in which there exists alkahol, diluted, stimulate sooner, and their operation is of shorter duration, than victuals prepared with condiments; and that, in proportion to the quantity of alkahol they contain. All these different kinds of food possess a diffusible, and consequently a direct stimulus. A stimulus is called direct, because it forthwith operates on the *excitability* of the part to which it is applied. Another kind of stimulus, depending on the moderate distention of muscular fibres, co-operates with a direct stimulus, at least,

least, as far as it regards victuals, and is consequently called an *indirect* stimulus.

The bulk alone of animal and vegetable food, the indirect stimulus of which latter is feeble, affords this *indirect* stimulus.

Good and abundant chyle, and blood, made of animal food, is a further stimulus; by this stimulus the *excitement* every where is increased, and more than any other equal part in the blood vessels, and, that in proportion to the abundance of blood. The nature or quality of the blood avails nothing, at least as a cause, its efficacy is owing only to its abundance, which acts with a constant impetus, distending the muscular fibres of the vessels.

The very celebrated plethora of physicians, corresponds with the Phlogistic Diathesis, and is proportioned to its magnitude. Does this stimulating effect increase by the velocity of the blood, and consequently by muscular motion, which
increases

increases the return of the blood too speedily to the heart, in consequence of compressing the veins? Nothing is more sufficient to bring on a Phlogistic Diathesis, and Phlogistic diseases, than this stimulus, which diseases are the more violent, the more abundant the blood is, and the more rapid its motion. This is further proved by all the symptoms attending these diseases, particularly by the pulsation of the arteries. This is also further proved by venesection, purging, and abstinence from food, which remedies are more than effectual to re-establish health here, and so manifestly hurtful in diseases of a different indication.

The other fluids secreted from the blood, are considered as stimulants also, each distending their vessels in different degrees, for which purpose milk and semen, both being abundant in their respective vessels, and in like manner, the perspirable fluids are very effectual. A commotion of a secreting organ, caused by the *excitability*,
which

which is one and the same indivisible property all over the system, is easily diffused throughout the body; when it is too great, and particularly when conjoined with other highly exciting powers, is adequate to the production of a Phlogistic Diathesis.

Intense thinking, operating on the organ to which it is directly applied, more than on any other equal part, increases the *excitement* all over the system. An exertion of the same faculty, whether very great, but for a short time, or in a lower degree, but often repeated and habituated, even alone, can be hurtful, and when conjoined with other *exciting* powers that are noxious, from the greatness of their stimulus, may be more so, and sufficient to produce a Phlogistic Diathesis. That degree of thought which wears out the *excitability*, as being purely an *indirect debilitant*, is excepted in this place.

Violent

Violent passions of the mind, such as great rage, violent resentment, immoderate joy, which arrive not at that magnitude, as to wear out the *excitability*, tend to the same that the exertion of thinking does, and admits of the same explanation.

Hereafter mention will be made of air, as a stimulus, without considering temperature; when, treating of particular noxious powers, such as contagion.

From the operation of any one of these powers, a Phlogistic Diathesis, predisposition to disease, or disease itself, may take place; but such effects are mostly the consequence of all or many of such powers conjoined, and do not proceed from any power implanted in the system.

In producing this Phlogistic Diathesis an inflammation of a particular part, in such as are not predisposed, is insufficient for these reasons, because such an inflam-

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mation happens very often without a general Diathesis, because in diseases which are always attended with general inflammation, a local inflammation follows the Diathesis, and follows a Pyrexia itself generally, and never precedes it ; and because those diseases, whose Pyrexia depends on an inflammation of the part, by the removal of such a partial inflammation ; these Diseases are removed, and the remedies which remove a Phlogistic Diathesis, seldom do any good in this case.

Also, because whenever a partial inflammation seems to constitute a Phlogistic disease, that inflammation produces evidently different diseases in people of different constitutions, or in the same person at different times. In order that you may the better understand that the event is directed by the Diathesis, and that the Diathesis does not proceed from the inflammation of the part ; and because, in some cases, where a shadow of a Phlogistic disease appears, that inflammation, which is
commonly

commonly considered as the cause of the Disease, and was supposed itself a symptom of a different affection, and lastly, because a supposition of the diseases, proceeding from inflammation, falsely supposes predisposition not necessary for producing the Disease.

Stimulants, acrid substances, and compression, acting on a part, and injuring it, are not to be ranked among general powers creating a Phlogistic Diathesis; for if people fall into this Diathesis, it causes a Disease, if not, the affection is not a Phlogistic one, but only an appearance of such, differing in cause, symptoms, and cure; nor is there any regard to be paid to these local affections, in disorders of this kind, than as far as they should be understood to be hurtful, when conjoined with a Phlogistic Diathesis, and are to be removed consequently as much as in our power; but their effects are never to be confounded with the effects of a general *excitement*, constituting Phlogistic

D 2

gistic Diseases, which notwithstanding is the general opinion. Of these stimuli, compression is to be rejected on another account, because it is a symptom of a different disease, whether common or local, and takes place, as well in every Diathesis, as when there is none at all.

Thus, then, the cause of a Phlogistic Diathesis, proceeds from the operation of the powers mentioned; whereupon too great an *excitement* of the living system takes place; first increasing all the actions, afterwards disturbing some, and diminishing others, by inducing debility, but never as long as the *excitement* continues. The origin of all Phlogistic Diseases, therefore, is the same, and no other.

Before the disturbance of the functions, which never takes place until a proper disorder is formed, and then even, only in its greater violence, all the senses, all the motions, both voluntary and involuntary,
are

are stronger, the genius more acute, the sensibility and affections greater. The heart and arteries are proved to acquire vigour by their increased pulsations; the extreme vessels of the body are proved to acquire vigour by their heat, all the muscles by their increased strength; the internal secretions, by an abundance of milk and semen; the digestive organs by a desire for victuals and by the force of the powers of digestion, vigour of body, and an evident redundancy of blood, all which tend to prove the same. How much the faculties of the mind and passions are increased in vigour, we learn by comparing them, in this Diathesis, with themselves in sound health, and also in the second species of Diseases, and the predisposition to the species. Thus all the actions are first increased.

The disturbance of which actions, during the continuance of too great *excitement*, does not appear much in this state of the Disease, clearly to point out the state

state of vigour then present in the constitution, so that you cannot clearly observe the mark of too much vigour.

The cause, disturbing the actions, is a Diathesis raised too high or too great *excitement* all over the body; whence it comes to pass, that in the progress of the disease, many marks of *indirect* debility, which belong to another place, appear. In like manner, the same *excitement* violently assailing any part necessary for life, or highly excitable, is connected with the general *excitement* of the whole body, necessarily, and not the latter with the former.

The debilitating state of these diseases, consists in such an increase of the Diathesis as produces horreur, languor, and lassitude, by checking the perspiration, and lessening the action of the stomach, or otherwise injuring it, by exciting too much its muscular fibres, as shall be mentioned in full in its proper place.

Inasmuch

Inasmuch as these effects proceed from too great *excitement* and are removed by debilitating powers, consequently not debility but an *excitement*, greater than is necessary for performing the proper actions, is considered as the cause of these effects.

The exciting powers create and increase *excitement* all over the body, because *excitability* is one indivisible quality throughout, and whenever affected, is every where acted on. Again, these affect any one part more than any other equal part, because they directly operate on the part, each on different parts. As far as the same powers do not diminish the force of the actions, they do it, because they stimulate directly, and too highly, nor carry on the stimulus to that magnitude which becomes an *indirect debilitating* noxious power. They diminish tonic actions, such as of the stomach, muscles, and brain, for a short time; on this account, because a very high stimulating power is improper for the perfect

perfect functions of these organs. Take care not to think that this diminution proceeds from a deficiency of stimulus, and distinguish it from dyspeptic symptoms of long standing, evidently arising from a debilitated source, conjoined with a concurrence of symptoms of the same indication, and which are to be removed by stimulating powers.

EXCITEMENT, affecting the brain or lungs, and disturbing their actions, arises on this account, because the stimulus of the distending blood is there more acute, and there, finding a greater *excitability* than in any other part, increases to a higher degree the effect of both, viz. *excitement* hurts these organs, and comes near to such a state of the part at last, as that its *excitability* may be intirely worn out.

Obstructed perspiration causes horroure and a sense of cold ; but obstructed perspiration itself is caused by a Phlogistic
Diathefis,

Diatheſis, highly increaſed on the extreme veſſels. The Diatheſis is more exquisite on the external than internal parts, becauſe the operation of extraordinary heat alone is more powerful, on the ſurface on which it is directly applied, than in the internal parts, or becauſe the operation is increaſed, in conſequence of the preceding cold permitting the *excitability* to be more highly increaſed there, than in the internal parts. That this is not to be attributed to ſpaſm or the aſtringent operation of cold, we learn from the effects of the ſame highly exciting powers cauſing all the other ſymptoms as well as theſe, and alſo from the ſame remedies which remove this ſymptom, as well as every other part of the diſeaſe.

Symptoms of *debility* follow a vehement Diatheſis in proper Phlogiſtic diſeaſes, becauſe the continuance of *excitement* increaſed, but not ſo much as immediately to bring on *indirect debility*, tends to the ſame and produces the ſame effect. That this

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does not happen, within the limits of Phlogistic predisposition, and in slighter Phlogistic diseases, we are assured from this, that here there are no evident symptoms of *debility* &c.

An *excitement* violently affecting a part often changes the form and texture of it as an organ.

The same *excitement*, on account of its extreme magnitude, changing into diminished *excitement*, or no *excitement* in the end, injures the part as an organ, but otherwise it is still considered as a living solid. The terminations of inflammation prove both circumstances, to wit, suppuration proves the former, and effusion, gangrene, and chronic or lingering inflammation, the latter. These local injuries arising from general Phlogistic diseases, are to be prevented by the physician, or if this prevention be not accomplished, are to be remedied as much as in his power.

Inflammation

Inflammation attending or following Phlogistic diseases, affects generally the exterior parts of the body, because heat *directly* stimulating or cold permitting the *excitability* to increase, and thus increasing the effect of heat, and other stimuli, operate with the greatest force on the surface and by suppressing the perspiration increases the Phlogistic Diathesis, in the adjacent parts. For inflammation here is nothing else than an increased condition of the part inflamed, in common with the rest of the body. Which inflammation as it is constituted by an increased *excitement* in one part, more than in any other equal part, so, before a proper disease takes place, a part or a symptom of which is inflammation, the *excitement* of that part is understood to be proportionably greater than the *excitement* of any other equal part.

Effusion, which is very often a consequence following Phlogistic diseases, is either sanguiferous or serous, and depends

on the extreme *excitement* of the vessels, of the part wearing out the *excitability* therein, which then ceasing and permitting the muscular fibres like the simple solids, to be relaxed and the diameters of the vessels to be enlarged: hence an effusion of the fluids without a *vi a tergo*.

The same termination of *excitement* takes place in gangrene, and proceeds from the same cause and is attended with a similar relaxation of the fibres, permitting the fluids to rest, stagnate, and corrupt within, as well as without the affected vessels, which terminates in a destruction of the texture and in a mortification of the part.

Distention, less than is sufficient to produce effusion or gangrene, but still so great that the vessels may receive a greater than their usual quantity of blood, in consequence of the application of a slight stimulating cause, such as increased heat, or motion of the vessels, and thus to retain the blood, when taken in, and
thence

thence bring a lingering affection, I say, such a distention causes a slow inflammation of the vessels labouring under an acute disease.

As these effects or terminations of the cause of Phlogistic disease are only occasionally mentioned in this place, because they happen as effects occasioned by these diseases; so their explanation, which is different from the common Phlogistic doctrine, belongs to another place. In relating which briefly here, we have studied advantage more than order.

Although the muscular fibres of the vessels are by so much the more powerfully contracted in proportion to the quantity of circulating blood, which distends them, and from thence the Phlogistic Diathesis, of all the other vessels of the body as well as of those immediately inflamed undoubtedly proceeds, nevertheless, there is need of the support of the simple solids necessary to produce that effect

effect, whether we consider the very muscular fibres themselves, as simple solids, or whether the other fibres, altogether destitute of *excitability*, be considered as such, which support them, except in one character of diseases.

This character is that, wherein, while all other circumstances, which constitute a Phlogistic Diathesis, is suitable to the bulk of the simple solids, yet the cohesion of the particles are somewhat different. Hence while the blood as in other diseases abounds, and by this abundance distends, and in consequence of this distention stimulates, and by that stimulus the muscular fibres, are contracted, nevertheless these muscular fibres being not supported by the simple solids yield to distention. That this possibly may be the case is proved by ruptures of the *Aorta* near the heart, often observed after death, by the known tenuity of the simple solids, in acute hæmorrhages, which also support this observation, and the insuperable leanness of many persons, otherwise strong does the same.

That

That this is the case, is also evident by the same appearance of hæmorrhagic people, and by the cure as far as it is properly managed.

In this peculiar condition, the state of the vessels of the part, and of the whole body is the same, but that here some small particular vessels, being unsupported by the neighbouring parts, are relaxed and ruptured.

Contagious matter, causes inflammatory eruptions on the skin, being there collected and rendered acrid by stagnation, which consequently are only symptomatic. So the intention of cure, to be drawn from thence, is to diminish the too great *excitement*, and reduce it to the proper standard of sound health.

Peculiar symptoms, attending a dense eruption in a typhus, proceed from a Phlogistic Diathesis, increased too high in the end, and thence *indirectly debilitating*. As the cause constituting a Phlogistic Diathesis,

thesis, is such as has been mentioned. before, Vol. II. page 27. so the intention of cure, deducible from thence, is to diminish the *excitement* in all parts of the system, until it comes down to that degree which is necessary for health. The remedies affecting this intention are the very same powers which create this *Phlogistic* Diathesis, by stimulating too highly but now acting with so low, and diminished a stimulus, as not to give that degree of *excitement* which is necessary for health. Therefore as the same powers which are hurtful, by too extraordinary a stimulus, are called stimulants, so these powers when serviceable from their low operation, are called *debilitants*, for there are no sedatives in nature.

That temperature which is called heat, is altogether here to be avoided, because that degree of it which *debilitates*, viz. too much in the extreme, cannot arrive at that magnitude which *debilitates*, without a danger of very great injury or destruction

destruction, resulting from such a violent stimulus.

When an increased Diathesis, and *excitement* causing that Diathesis, are not very violent, in this state of a proper disease, we are not to hinder the application of that degree of heat which attends sweat, or the tepid bath; because the loss of fluids by sweating, and the agreeable sensation in bathing, give us reason to expect more advantage than the disadvantage resulting from a moderate degree of heat.

But particularly, heat is to be avoided after the application of cold intense in any degree, because the operation of it becomes more powerful, in consequence of the increase of *excitability*, by the application of cold, this effect is the more to be dreaded, the more numerous the stimuli are, which co-operate at the same time. Cold here is a salutary temperature; provided it be succeeded by no great heat. Therefore, that error in

VOL. II. F the

the practice of physic should be corrected, which supposes cold, by its stimulating effects, to prove noxious in a Phlogistic Diathesis, and the same operation of cold is to be understood to do service in the small pox, not so much by its *debilitating* power, as by avoiding stimuli, after its operation. The same cold, by making use of proper caution, is lately found to be the most effectual remedy of Catarrh, which is constituted by heat alone, or by succeeding cold, either by itself or when conjoined with other *debilitating* powers.

From whence, and because a cap made of fresh clay has been of service in a phrenitis and that degree of cold which constitutes frost and snow, being applied to the body, removed a Synocha, attended with a delirium; and in like manner the same application of cold has been serviceable in the small-pox; for these reasons, the application of it is to be extended to the whole circle, both of Predisposition
and

and Diseases, depending on a *Phlogistic* Diathesis.

That no injury can arise from the supposed astringent power of cold, in a *Phlogistic* Diathesis, is evident from its great efficacy applied to the surface of the body, in the small-pox, by which the perspiration is rendered the more free and open, and that, the greater the power of cold is applied.

That you may, with greater certainty, be able to command a *Phlogistic* Diathesis, in that state thereof which indicates a great danger of Disease, you should order abstinence from animal food, and all preparations thereof, and administer freely a vegetable diet. This Diathesis, increased to the magnitude of a Disease, is removed by abstinence from animal food, especially in a solid form, and by a competent use of vegetable diet, of the most succulent kind. This Diathesis, I say, is removed in the best manner possible, as far as regards

F 2

regimen,

regimen, in the manner described; See Vol. II. page 22, 23.

In every part of this Diathesis it is proper to decline the use of condiments, which in these Diseases are poisonous.--- Watry drink is suitable to the same Diathesis, and all strong drink noxious, and the more so, in proportion to the quantity of alkahol it contains. This same alkahol, if it be not highly diluted, is a destruction in *Phlogistic* Diseases; in all which, water, to which a small quantity of acid is added, exceeds the use of small beer, which a very great author has taken into practice.* Inasmuch as the *indirect* stimulus of food assists the *direct*, *i. e.* diffuses the stimulus through the whole system, consequently limits should be put to the bulk of the suitable matter taken in. page 45, Vol. II.

In order to diminish the stimulus, which abundance of blood and chyle *directly* affords to all parts of the body, this abundance, when greatest, can be removed
by

by abstinence, venesection, and purging; but when the quantity of blood is but moderate in these diseases, the directions delivered above, which relate to an inferior kind of Diathesis, are to be observed; that is to say, we should persist in purging, now and then, in ordering a spare diet, but not draw away blood. And if at any time food should be taken in somewhat liberal, we should promote perspiration by gentle and repeated exercise. These things will remedy the effects of too violent circulation of the blood, and as far as it regards its quantity; which velocity depending on the violent motion of the body, which, in an inferior Diathesis, constitutes predisposition or Diseases of the Phlogistic kind, will be diminished by using less exercise, more rest, and less of the other stimulating powers. But in the greatest Diathesis, which causes the most violent diseases, the stimulus of all the *exciting* powers must be as much as possible prevented, and blood let in the greatest profusion, in order to retard the violence

violence of circulation. It is needless to *direct* the patients to rest, which they necessarily must do, whether they will or not.

The stimulus, which abundance of the fluids secreted in the excreting ducts causes distention, is removed by taking away the powers which create it. Therefore, copulation should be more frequently used, milk avoided, take less nutritious diet, let perspiration be restored by removing the Phlogistic Diathesis on the surface of the body.

The proper remedy of the stimulus caused by thought, whether vehement or long continued, is a remission of the same, and let that frequency be attended to which in the end *debilitates*, both in magnitude and frequency, which by wearing out the *excitability*; in fine, at last brings on *indirect debility*, which rule, as it is suitable to the state of predisposition, so it cannot be omitted, with any sort of propriety, when a disease takes place,
especially

especially of the vehement kind ; because there is no coming to the assistance of the disease, which is *debility*, except thro' that intermediate magnitude of stimulus, which would prove hurtful by increasing the *excitement* already too great.

In order to remedy a lesser degree of Diathesis in predisposition, and to obviate disease, the habit of violent passions is to be checked.

The extreme effect of these passions, as *indirectly debilitating*, is by no means to be wished for, on account of the intermediate danger of extraordinary *excitement*.

These powers, the same in kind which constitute the Phlogistic Diathesis, differing only in magnitude, and altogether opposite in this respect, very seldom, and with less success each part, but very often, and with better success, when very many are applied ; but best of all, when all are
conjoined,

conjoined, and great necessity requires, it, remove this Diathesis. &c.

As venesection is the most powerful of all, as being that which compleatly takes away a stimulus, which is by so much the more powerful, by how much it is more extensively applied to the body, so whenever this Diathesis comes to any great height, it is to be used extensively or largely, but never in predisposition, and is very sparingly, or not at all to be used in the milder kinds of Phlogistic diseases; and the cure is to be left to other remedies.

Cold, taking care that heat should be avoided after its operation, and other stimuli claims to itself in the cure of Phlogistic diseases, the second place; heat always proves hurtful, and more so, when it comes after cold; but particularly so, when conjoined with other violent stimuli. Cold always proves serviceable, and that in proportion to its magnitude, if a
foreign

foreign stimulus, conjoined with its operation, or following after it, or exceeding it, be cautiously avoided.

Purging occupies the third place after these, which very powerfully resolves a Phlogistic Diathesis, and consequently obviates, to the great benefit of the patient, the necessity of drawing blood. This same power, even alone, is sufficient to re-establish health in some cases.

Together with all these powers we must withhold the use of victuals, whose stimulus prevents the good to be derived from the former powers, and that in proportion to the magnitude of the Diathesis. Which alone is sufficient for removing always predisposition, and very often such diseases as are caused by the milder Phlogistic Diathesis.

With all the foregoing powers, rest is to be conjoined in every disease, and all
VOL. II. G things

things that allay motion, in predisposing to these diseases.

The worst custom of the general run of physicians, is, that they continue the too great application of some one of these remedies, omit all the rest, or pay little attention to them. We should not depend on venesection alone, even in peripneumony, but all the other powers should be applied at the same time, or in succession. In a word, as the powers which constitute predisposition to disease, or diseases themselves, operate more violently on one part ; that is, that part which it directly affects, so all the remedies too are to be directed, each to different parts, that the general effect of all may, with greater certainty, reach the whole system, and every where equally act on the *excitability*. The Spaniards besieged Gibraltar, with less hopes of carrying the town, the narrower the passage was to attack it by, as they would make a greater impression on it, if their soldiers had it in their power,

in

in many parts at once, or in all places around, to batter down the walls, and undermine them.

We obviate the symptoms of debility which follow in the course of the disease, and the vehemence of a Phlogistic Diathesis, in the course of the disease, threatening death by *indirect debility*; I say, we obviate these symptoms by the foregoing remedies timely applied.

The same timely cure tends to prevent suppuration, effusion, and gangrene, arising from too great *excitement* in the end, and thus passing into *indirect debility*.

A tedious or chronic inflammation, following an acute one, as being a local affection, for a general one, belongs to another place, depending on a relaxation, and atony of the fibres of the vessels, and is to be cured by all kinds of powers, which give them strength and *excitement*. Cold is the remedy here whose action we have

already explained, which in this case affects the part, as it does the whole body in other cases, not by causing an astringent, which is either wanting or cannot remain, the cause being removed. The notion of astringent depends on a false idea of cold, because the heat is less, it acts consequently on simple matter, as is the case here like heat, but diminished. If then heat relaxes, cold must also relax, but less. After which manner acting in this case, it is useful, but the increased *excitement*, following this operation of cold in this case, as well as in others, is to be attributed to the increased power of the succeeding stimuli. Lest this condensing effect of cold may be lost, the too great and consequently relaxing power of heat is to be avoided. The latter is to be applied in such a quantity and so low, as produces a just *excitement*, without the preceding application of cold. After the application of cold, therefore a moderate degree of heat is proper: Too great heat is

is hurtful by bringing on *indirect debility* which increases the disease.

As an acute inflammation can be changed into a chronic one : So the intire Phlogistic Diathesis can be changed into an Asthenic one, the pathology as well as the cure of which, is to be referred to the class of Asthenic diseases ; but the intention of strengthening the whole system and of the part liable to inflammation, in consequence of relaxation and atony, and defending it from this cause belongs to this place.

Besides these directions, care must be taken that the body be so placed as that the blood, inclined by its specific gravity, should not, in a great quantity flow into the enfeebled and relaxed vessels of the part affected.

It belongs also to the cure of all profluvia, whenever they threaten that every violent motion of the body, consequently
exercise

exercise and particularly hard labour be avoided. And also that intire rest be observed, or at most gestation only used.

If, along with the effects of stimuli or acrid substances, wounding or eroding any interior part, a Phlogistic Diathesis should chance to be conjoined with a pyrexia, a similar method of cure proves effectual. In which case the physician should take it up as a certainty that he attacks the general Diathesis, and does not proceed to the cure upon any other grounds.

THE
PHLOGISTIC DIATHESIS,*Illustrated by the Explication*OF THE
SYMPTOMS.*

THE vigour of the senses, motions, ~~of with~~ the mind, and affections depend on the increase of the *excitement*, in their

* By former doctrines, the illustration of the symptoms has been as follows.

The heat is excited by the reciprocal action, and reaction of the solids and fluids. The irritation on the fibres increases the action of the vessels; the volosity of the fluids is thereby quickened through them, and

their separate organs, which affects the blood during its other operations.

thus heat is excited in proportion, as there is crassamentum in the blood.

The pain is excited by the distention of the vessels, in parts become already preternaturally sensible.

The swelling is not caused by obstructed blood, but by the excess of heat distending the cellular membrane; but swelling is not essential to constitute inflammation.

The redness proceeds from the quantity of blood brought to the part.

The quickness of pulse from that law of nature, by which the heart always increases its efforts, to free its vessels from any injury they may sustain from accidental, or preternatural irritation.

The dryness of the skin is said to proceed from the stricture in the capillaries, whose use is greatly impaired by the irritation on them.

The itching is but the beginning of what terminates in pain by its increase.

Horror

Horror characterizes the beginning of all Phlogistic diseases. This arises from the diminished perspiration, in the extreme vessels of the skin, during a vigorous Diathesis. The sense of cold, which often accompanies horror, may be explained by the same.

In these same affections the pulse vibrates stronger, harder, more full, and somewhat more frequent than in sound health. Animal food taken plentifully during the time of the predisposition renders it full and hard. The same stimulus, or any other, as that of strong drink, exercise, whether of body or mind; also all the noxious stimulants indeed produce this effect.

But if, during the disease, the pulses become softer, weaker, and more quick, it is a bad sign, and it comes from either a debilitant, cure being tried beyond proper laws; or, (this being neglected) from

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a too great force of *excitement* bringing on some little *indirect debility*. The former cause *direct*, the latter *indirect debility*, both must certainly be shunned and avoided.

A redundancy of blood, suppressing perspiration through a too great Phlogistic Diathesis, causes a pale colour in the vessels of the surface of the body, which is often the result of an abundance of secreted fluids. This is the cause of the head-ach and pain in the joints. Which as often as it affects the head it easily yields to letting blood; therefore an inward inflammation here, is seldom to be suspected: And the less so, because in common Phlogistic diseases the arising inflammation always occupies an outward or exterior place, as much as we can learn.

Delirium which sometimes takes place in a too vehement disease, is not to be imputed to inflammation, for a reason lately given.

given. For it so appeared by the deduction of blood and the other fluids, that we have no sufficient reason to believe it to be inwardly, a redundancy of blood in the vessels distending them beyond measure is the principle and whole cause of this; hence a ruddy countenance, shewing that redundancy, and from thence venesection driving away the disorder at one stroke, is an evident proof.

Thirst and heat, the great marks of Phlogistic diseases, depended on the Phlogistic Diathesis in the extreme vessels of the jaws, and of the skin, this so obstructing the passages as not to permit perspiration; yet nevertheless suffers the blood to pass the bounds of the small vessels, and thus increases the natural heat of the body under the skin, on account of the perspiration being thus suppressed, and the mouth supplied by the extremities of the vessels, which pour out spittle, and other fluids; which in their free flowing prevent dryness and that sense called thirst, but now

being obstructed, beget that very disagreeable and troublesome sensation, generally proceeded in this order and succeed one another. Hoarseness is often the first, then a dry cough, attended at last with spitting. The origin and source of the hoarseness and dry cough, is the limits and ends of those small exhalating and mucous vessels, which terminate in the bronchia, being shut up by a vehement Diathesis and not transmitting those fluids, by which the bronchia and aspera arteria are lubricated, if the hoarseness is removed the spittle easily follows again, and is freely ejected.

As the free flowing of spittle demonstrates a relaxation of the Diathesis, so a too free evacuation, is a sign of *debility* taking place, the disease tending to an asthenic diathesis, by proceeding to *indirect debility*, as when a disease hath exhausted the *excitability* or through *direct debility* by too great a use of debilitants.

These

These same symptoms while they are kept within the bounds of *direct debility*, or not yet changed to *indirect*, are occasioned by heat and what ever stimulates too much ; and are removed by cold, or whatever debilitates, &c.

Paleness or clearness of urine and costiveness, which happen particularly about the commencement of a disease, comes from the magnitude of the Diathesis, so shutting up the ends of the vessels, that either nothing may be voided, or else only the thinner part of the urine may flow. The absence of thirst, looseness of the belly, and restoration of perspiration, &c. are signs that the Diathesis remits gradually, and that the disorder is mitigated ; and, that it is in such a state that by vomits, clysters, and sudorifics accompanied with other antiphlogistic remedies the disease may be entirely rooted out.

Often

Often in Phlogistic Disorders of a milder nature; the desire of food is not much diminished, it often may be taken in a greater quantity than what is really useful; but unless a slight matter of herbs alone be given, and that in the form of a watery portion or some liquid, it will be attended with bad consequences.

But when the disease is arrived at its greatest height, either through the indulging of too nourishing food, or by stimulant remedies being applied, or arising in the beginning, from strong noxious powers; then all the other bad symptoms above-mentioned, as well as the grievous host of complaints of the stomach, and an acute pain in the breast, disturbing it directly take place.

In a vehement diathesis, therefore, where there is little want of food, and great call for water to drink, this latter must be indulged by all means, and the
former

former must be avoided, as *exciting* a loathing, sickness and vomiting. These are not usual, unless the diathesis is going to turn, or has turned, by the means related above, into an asthenic one, and the other symptoms being removed, they yield to a proper antiphlogistic cure. But when sickness and vomiting are urged on and violent, and more permanent, yet we know that they are without *indirect debility*; if the pulse yet keeps a moderate quickness, and does not abate much of its fullness and force; if vomits and clysters lessen the morbid state; in a word, the antiphlogistic remedies then answer. But when the disorder is changed, and the cause is become diametrically opposite, then we shall understand, as these symptoms increase every day, and the pulse becomes weaker when the griping in the bowels, and liquid dejections are added to the whole host of stomach complaints, that then the antiphlogistic cure is manifestly hurtful.

While

While the symptoms do not indicate *indirect debility*, a too great *excitement*, tending to it, excites commotions sooner in the stomach than any where besides, on account of its great sensibility, and the force of the more powerful stimuli acting chiefly thereon; for here are the most powerful stimuli applied first, such as are particularly proper to excite a Phlogistic diathesis, and they exercise a greater force over the *excitability* of the same. Such are the various preparations of animal food, different mellow wine, different seasonings, various diffusible stimulants, as the forms of opium, volatile alkali, camphire, musk, and æther; all which affect this more than any other equal part; more than the intestines, for their principles are first changed by concoction before they pass the duodenum; more than the lacteals, because they are received by them after they are diluted and changed by the operation of concoction, and when they are received they are carried to the blood; more than

on

on the heart and arteries, on account of the same dilution, and perpetual change in the whole circuit of mixture, more than on the extremities of the arteries, either exhalant or glandular, or whether they eject the already corrupt matter out of the system, or they bring something salutary to the blood through the lymphatic vessels, and that as well for the same reason, as on account of some great change produced in the exhalants and glands; more than on the lymphatic vessels; where a new fluid constantly passes to the old ones, through the branches that run between, and particularly the thoracic duct; more than on the other blood vessels, on account of the great change from their repeated circuit; more than the muscular fibres, whether voluntarily or not, because the stimuli do not touch them; more than on the brain, or the medullary solid, for the same reason, and on account of the great distance of these parts from the stimulants. In a word, as

noxious, or medicinal, act more powerfully on some places than on others, and these same are the first that are operated upon, and come directly in contact; these, therefore, before all others, are more ready to pass from a Phlogistic to an asthenic Diathesis, or *vice versa*; but yet in such a manner, that, though the *excitability* be one only and indivisible quality in the system, whether the *excitement* be increased in a peculiar place, or whether it be diminished, and whether it be lessened, through *direct* or *indirect debility*, and the asthenic Diathesis be now formed, the other operations of the system soon follow the genus mutationis.

And seeing the powers, which acted, have been and actually are the same, *i. e.* either too great or too little stimulants; and seeing the *excitability*, on which they have and really do act is the same, *i. e.* the whole cause is the same, it is necessary that the effect should be
the

the same, *i. e.* the mode of operation in the whole system, whether redundant or deficient, is necessarily the same.

Inflammation, the companion of phlegmasia, always almost occupies an outward seat, as far as we know its nature. The reason is, because heat, which is a very powerful Phlogistic noxious power, either alone, or alternating by turns with succeeding cold exerts its force, on the parts, to which it is directly applied, much more than inwardly, where the temperature is almost always unchangeable, as also the lungs, by different forms of inflammation, which are to be accounted as external and outward, because a *direct* passage to them, is open to the air, are, before all other places, affected with inflammation. Besides, the violence of the *exciting* noxious power just mentioned, there is a sensibility of the part that is to undergo inflammation, and a greater and more abundant *excitability*, than in the other parts, which is the

cause that first one of the above mentioned parts, and then another are affected above all the others ; an addition to the cause is, that in whatsoever any ^{case} of the above mentioned parts are ~~offended~~ ^{excited}, and in whatsoever manner it has undergone that inflammation, peculiar to the phlegmasiæ, that ^a ~~some~~ part on every accession of a new phlegmasia is in more danger than all the rest. This is the manifest source of some phlegmasiæ, as of the repeated cynanche tonsillaris and rheumatism. The peripneumony happens more rarely than the other disease of this kind, because it is obviated by many means proper to prevent Phlogistic Diathesis together with its companion inflammation, viz. by breathing a clear air in the ordinary state of it, &c.

Inflammation here is nothing else than a state of the part inflamed common with the rest of the system, but more increased than in any other equal part, and as *excitement*, more augmented in one place than

than any other equal one constitutes inflammation; so, before a disease, of which inflammation is a part or symptom, *excitement* is understood to be greater in that place, in proportion, than in any other. This is an inflammation accompanied by a Phlogistic Diathesis.

This inflammation, for distinction's sake, is to be called common Phlogistic, is to be distinguished from the other, which is a local affection arising from local injury, and consists in the fault of an organ or solution of a part.

The word local agrees with this latter Phlogistic inflammation, and the common always depends on the Phlogistic Diathesis; and is only a part or symptom, never preceding, but always sooner or later succeeds it. It rises from the same noxious powers, and is cured by the same remedies. On the contrary, the local inflammation, as it arises from a local affection, which dissolves the continuance or disturbs the
texture

texture of the part ; so if the part affected be not very sensible, the consequence will not be very dangerous. In a part endued with great sensibility, as the inside or outside of the stomach or intestines, or of the tender flesh under the nail, the effect is often spread over the whole body, and, from the affection of all the vessels, a commotion or restlessness every where takes place. This same inflammation, whether local or common, gives way to those remedies alone, which operate on the part affected first, and tends to restore the continuance of the part. These will suffice at present concerning the distinction of Phlogistic inflammations, more will be said when we come to treat of the local ones afterwards, in their proper place. Many other things remain, both of the local and common, to be explained hereafter,

Inflammation is known by the symptoms of perturbation, as often as the vital organ is affected ; but, whether or no,
common

common Phlogistic inflammation ever attacks the brain and its meninges, is as yet uncertain. It is more probable that disturbance in the brain and phrenzy do not depend on inflammation, as the following examples seem to shew: First, The facility of the cure, since all these disorders give way to bleeding, clysters, and other anti-phlogistic remedies; nor is it credible that the effects of a proper inflammation, in so tender and necessary a part of the body, could be so easily removed. Secondly, There is no more certain proof of inflammation being removed, than health being restored. Thirdly, The similitude of the cause produces the same effects, and, as has been before related, no common inflammation arises inwardly almost under a common Phlogistic disorder; which inflammation, whenever it happens, always occupies an exterior place. Moreover, all the symptoms are of the same nature with those that arise from the common Phlogistic noxious powers, and will yield,

in

in proportion to their magnitude, to all the common antiphlogistic remedies.

The reason of head-ach, red eyes, and delirium, which attend phrenzy, and are imputed to inward inflammation, is the abundance of blood in the vessels of the head, distending them immoderately, and thus through violence of distention causing great pain.

Moreover, there is no doubt but inflammation is the result of that disturbance which usually happens to the lungs, and that the external pains here correspond to internal inflammation; and as inflammation is in proportion to the magnitude ~~the~~ of the Phlogistic affection, which inflammation never happens, unless in a great diathesis, so the pain is in proportion to the magnitude of the inflammation; and from the consideration of the same cause, the state of the pulse is to be estimated; in a great diathesis, its result will be a proportionate inflammation. There is an
acute

acute and, as it were, pungent pain about the breast, sometimes about the sternum, then over the breasts, then beyond both, then in the back, either between or above the scapulæ, and the pulse is strong and hard. In a less diathesis and inflammation, the pain is less acute, a little more dull and tolerable; the pulses are hard and strong, yet less so than in the other case. Afterwards, during the progress of the disease, the pain abates again, grows dull, and the breath, which was disturbed, is now easier and more readily taken. The pulses, which before had only little hardness, now indeed, on account of the magnitude of *indirect debility*, through neglect of proper remedies, or on account of bringing on *direct debility*, from too great a use of the antiphlogistic cure, are entirely softened. But the hardness of the pulses, and encrease of pain, is never to be referred to the seat of inflammation on the brain; nor is their softness and dullness to be thought to consist in the substance of the lungs as the seat of in-

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flammation ; because it is impossible for inflammation to occupy either of these parts, and not to be found in the parts contiguous to them. The cause of these symptoms above related, therefore, is to be admitted as the real one.

The pustules, which attend certain Phlogistic disorders, arise from contagion received in, and spread over all the system, and is retained under the skin, with the perspirable fluid in the vessels of the same. The cause of the retention and multitude of pustules, is the Phlogistic Diathesis, prevalent in the whole system, but more so in the vessels of the skin, for the reasons above related. In which operation the muscular fibres of the perspirable vessels, because they are so much, inasmuch as they are hitherto considered as simple solids, denser, are as much as they are considered as living solids, augmented in tone, and are therefore excited to such a degree, as not to let pass the vapour of perspirable matter.

Of

Of STHENIC DISEASES.

ALL Phlogistic diseases are attended with a general increased *excitement*, which is evinced by the increase of vigour both in body and mind and the increase of some, and the disturbance of other of the functions,

There are some of these diseases which are distinguished from others, by their degrees of magnitude. Some sthenic diseases are attended with a pyrexia and an inflammation of some external part, some are without this and some are attended with neither.

The common sthenic disorders attended with a pyrexia and an inflammation, are called partly phlegmasiæ, partly exanthemata, which without any distinction, we will treat of in their order of *excitement* from their greatest to the least.

To the Phlogistic phlegmasia and exanthemata, are common after the Phlogistic Diathesis, as much as usually happens in the predisposition, a horreur, sense of cold, languor, weariness as it were, quickness of the pulse, moderate in the beginning, and in a mild disease, a strength and hardness of the same, a dryness of the skin, a retention of secretion in some places, a redness of urine, great heat and often thirst.

To these are peculiar an inflammation of an external part, or an affection nearly allied, preceded for the most part by a common affection, but never followed by such. Which common affection, to distinguish it the better from *Fevers*, is to be called pyrexia. In sthenic exanthemata an eruption of spots, or pustules covers, or marks the whole skin, more frequently or more seldom, according to the magnitude of the Diathesis. Any foreign contagious matter, received into
the

the body and retained under the skin, produces the same effect.

The explication of all these, from the doctrine delivered above, flows spontaneously. The sthenic Diathesis precedes in the manner we have spoken of so much before when excited by stimulant powers. The indications, from the pulses are never to be referred to any affection of them, for we have shewed that they arise from the redundancy of blood, which stimulates by distending the vessels.

The quickness of pulse is here moderate, because while the stimulus excites one part, the quantity which is to be moved, prevents its quickness. It is manifest that it cannot pass with that quickness, as when there is a scarcity of it. A strength of pulse arises from a magnitude of *excitement* in the moving fibres of the vessels, which is commonly called tone, and from a magnitude of the density, of these same fibres considered as simple solids.

solids. Hardness of pulse is nothing else than a strong contraction remaining some-time, and keeping a quantity of blood in a narrow space, and thus representing as it were a tense chord.

That this is the exact state of the arteries is before proved, by the quantity of food required and taken in the time of predisposition, and by every such power as constitutes such a state uncommonly exciting every where, and consequently, among other effects, increasing the digestive powers; and also by aliments, which prevent and remove the diseases, in conjunction with other *debilitating* powers; which, as it was a very pernicious error to have confounded this state of the pulse with a contrary one, which has continually been the case, as it prevented the method of cure, so it cannot but be of great advantage to place this state in a very clear light.

Horroure

Horror and a sense of cold depend on dryness of the skin as a cause. Langour and lassitude indicate a greater *excitement* of the brain and muscular fibres, than can be properly borne by the *excitability* restricted to certain limits: consequently the actions are diminished here by a stimulating, not a *debilitating* cause; a great *excitement* and density of the fibres surrounding the extreme vessels causes a dryness of the skin, which diminish the diameters, so far as that the perspirable vapour cannot be taken into them, or, if taken, cannot be transmitted through them: which state is not a spasm or a striction proceeding from cold, but a Phlogistic Diathesis, greater in the skin than in any other part; because the stimulating power of heat, especially after the application of cold at other times, being a noxious power, causing Phlogistic diseases, operates more strongly on the surface than on the interior parts, and increases the sum of the stimulating powers.

The

The same is the cause of a temporary retention of other excretions, but that the mentioned operation of heat is different from the explication, and from thence a lesser degree of Diathesis affects the interior excreting vessels, which are relaxed, both on this account, and because they are naturally larger than the exterior ones, sooner in these diseases. The redness of urine takes place, because the general Diathesis, attacking the vessels secreting urine, prevents the secretion;---hence the fluid to be secreted endeavours to distend the vessels, and bursts them. The muscular fibres endeavour, by contracting themselves, to counteract and resist the distention, as far as they can discharge the office of simple solids; to which distention, during the violent action of the living solids, the force of cohesion in all the solids yielding somewhat, transmits the particles of blood, which does not take place in the beginning of the disease, because the distention of the fluids does not suddenly overcome the cohesion

cohesion of the simple solids 'till after
some time.

Obstructed perspiration is the cause of great heat, preventing that generated within the body to pass through the pores of the skin; which shall be more at large explained, when I come to treat of the same symptom happening in fevers too, in part; and on the same account a Phlogistic Diathesis, shutting up the excreting vessels, and hindering the excretion of the fluids of the fauces, creates thirst; to produce which effect, heat contributes, by dissipating the fluids that are excreted. Inflammation, and the affection bordering on it, whether it be catarrhal or any other affection, is a part of the Phlogistic Diathesis, greater in the inflamed part than in any other equal one, which the noxious *exciting* powers acting on the whole body, the symptoms of diseases, demonstrating a general affection, and the remedies removing it from the whole body, evincing a general affection, which generally

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precedes or happens at the same time with the affection of the part, and never follows it, because too great *excitement* being its cause, creating the Diathesis and diffusing it all over the body, pre-exists before the disease, and as it forms the rudiments of the local affection in predisposition so it does not from the local affection not even in a disease always, only in a certain magnitude of the latter, and of itself, hence in a great Diathesis, the affection of the part is great, in a lesser, it is inconsiderable, in a small and gentle Diathesis, there is no local affection at all, because a great magnitude of the morbid Diathesis is necessary to constitute it. Thus in peripneumony where the Diathesis and pyrexia are very great also in rheumatism, where it comes next in magnitude, the inflammation is formed great in proportion, in like manner; in the measles, the danger of which disease entirely consists in the vehemence of a Phlogistic Diathesis, an inflammation equally dangerous arises which, very often

attacks

attacks the lungs, and that dangerously. A Synocha phrenitica never happens but when a great Diathesis occurs, which causes an inflammation of the brain, or a predisposition to inflammation, nor is there any ~~danger~~ to be apprehended in Erysipelas from the inflammation even attacking the face except when the pyrexia is violent, which when mild insures us of a prosperous termination. A simple synocha is nothing else but a phlegmasia, consisting of pyrexia and a Phlogistic Diathesis unequal to cause an inflammation on account of its smallness. Nevertheless as all the noxious *exciting* powers and all the remedies are altogether the same as of any other phlegmasia, it was a very great ~~mistake~~ ~~to~~ to separate it from these, and conjoin it with *Fevers* which are diseases of extreme *debility*, and the more so because inflammation which is falsely supposed necessary for phlegmasia, is not wanting in this disease as often as a sufficient Diathesis for *exciting* it takes place. Which nevertheless could not be discerned on ac-

count of another error equally great and equally noxious, whereby the inflammation was considered as the cause of phlegmasia. In fine that you may be sure, that inflammation does not differ from the nature of catarrh, but is very often ~~wanting~~^{here} on account of the usual mediocrity of the general Diathesis, as often as the Diathesis increases which happens thro' a neglect of the proper method of cure, and from the effect of the noxious powers extended beyond the usual bounds an inflammation and very formidable too, arises often attacking the throat, and lungs, and *exciting* a disease, similar to a peripneumony, In fine, the cause is evident, why inflammation is wanting in all hæmorrhages. In that character of Phlogistic diseases, the general Diathesis being mild from the beginning and continually being kept moderate by repeated hæmorrhages, and sometimes altogether removed for a time. I say, such a Diathesis can never rise to that magnitude which is sufficient for forming inflammation.

This

This example of a thorn under the nail and wounding it, and bringing on inflammation after a wound, and communicating a similar affection to the shoulder, and a pyrexia all over the body, is mentioned to no purpose, as confirming and illustrating how phlegmasia proceeds from inflammation. For nothing like a phlegmasia follows this or a similar local injury, except a Phlogistic Diathesis happens to pre-exist in this case too, so as to pass or change into any disease. Without which Diathesis, no general affection takes place in the contrary Diathesis, a contrary disease arises, viz. a typhus of the most dangerous kind symptomatic of a gangrene.

That a local affection depends on a general one, and the general one not on the local is further proved by the presence of an inflammation often without being followed by any phlegmasia. Because as in the case just now mentioned, it very often happens, because either a general Diathesis

thesis is wanting or the place inflamed is not internal, and not very sensible. Thus all the instances of Phlegmon, all the instances of Erithma or Erysipelas, without a general Diathesis, being different from phlegmasia are very improperly connected with them, but more improperly with their *prototypes*, inasmuch as all these are local diseases, or symptoms of other diseases. Nor does a certain similarity of diseases, of internal inflammation, with phlegmasia invalidate this opinion: Inasmuch as these diseases are not preceded by the usual noxious powers, creative of phlegmasia, or any general affection, nor are cured by general remedies.

These diseases consequently, which arise from acrid stimuli and compression, and which are curable by removing alone the cause, which is seldom done by art, are ranked among the phlegmasia, thro' error of the worst kind, and most adverse to the cure.

The name of *Pyrexia* has been given with very great reason to the general affection which appears in phlegmasia, and the two next characters; as by this they may be distinguished from *Fevers*, which are diseases of extreme *debility* on the one hand, and on the other from a similar, but altogether different evil, which is a symptom of local diseases, and may be called a symptom.

The true phlegmasiæ which answer the definition are peripneumony, under which are comprehended the phrenites and the cardites as far as it is a general affection, a synocha with an affection of the head called phrenetica, rheumatism, erysipelas, cynanche tonsillaris, catarrh, and a simple synocha.

The HISTORY of PERIPNEUMONY.

THE peculiar symptoms of peripneumony are a pain in some part of the thorax, often shifting its place, difficult breathing, coughing generally, spitting sometimes blood.

The seat of the disease is all over the body, the whole nervous system with an increased Diathesis, in a state of predisposition general to the whole body, and no other new cause creating the disease; an inflammation within the breast, following the pyrexia after a considerable length of time, but never preceding it, venesection, and all the other remedies affecting not more, the place inflamed than any other part equally distant. I say, all these things prove that the disease is general all over the body, and the whole nervous system.

The peculiar seat of the inflammation which is a part of the general Diathesis,
is

is the substance of the lungs and the membrane, proceeding from the covering the surface of the same, called the *Pleura pulmonalis*; or a certain part of this membrane either covering the ribs inside, or including the *vicera* of the thorax without; in different parts of it, in different cases, and even in the same case, different parts are affected.

The pain in any outward part of the thorax depends on the inflammation of the different corresponding parts within, just now mentioned, which is confirmed by dissection of bodies; but it is very often the lungs adhering to the *pleura-costalis* constitutes the pain.

When the inflammation attacks the surface of the lungs, it cannot adhere or be confined to any other part separately, either the substance of the lungs or its membranes; for, if you but study the matter, how can you conceive that single

points of the same vessels, whether creeping on the surface of the membrane, or descending into the substance of the lungs, or ~~emerging~~^{arising} from thence, can be inflamed without an inflammation of the adjacent parts?

In like manner the distinction of inflammation into the paranchymatous and membranous, and the supposition of its being continually in the latter, is equally foreign from truth; which distinction, be well assured, was mentioned, not so much for the sake of practice (for the dispute does not at all concern the cure) as for the sake of shewing the usual vanity of pathologists.

The pain, during the course of the disease, often changes its place; because the inflammation, which is its immediate cause, is equally changeable, leaving its first place, or partly keeping it and partly quitting it, and rushing with violence into another place: which the well
known

known change of the seat of pain, compared with the vestiges of the inflammation of its corresponding parts, discovered after death, confirms. Which circumstance reflects, by another very weighty argument, on the notion of the disease being constituted, supported or depending any, how on an inflammation of the part, corroborates the opinion laid down here, and shews that the inflammation is directed by the general Diathesis, one time on this part, and another time on another, increases, and is in some sort multiplied; this is further corroborated, because the cure shews that the inflammation is weakened, rendered less extensive, and is removed from all parts of the body, when the general Diathesis is lessened or removed. The consideration of rheumatism confirms the same thing, whose powers are more severe and more numerous, in proportion to the strength of the general Diathesis, and milder and fewer in number in proportion to its slightness, distinguish these pains; depending on the general

Diathesis being a part of the general disease, from local pains, which very often happen alone without any general disease, and may chance to go before a general affection, if you do not wish wantonly to sport with terms, in a matter of importance to betray a scandalous ignorance and to impose upon the ignorant.

The difficulty of breathing is constituted by no exclusive fault in the lungs, or organs of respiration, by no deficiency of *excitement* in them, but only from the inhalation of air, which fills its proper vessels, distends them and thereby compresses the sanguiferous inflamed ones.

The cause of coughing proceeds from perspirable matter, as mentioned before, and also from mucus secreted and excreted, violently irritating the air vessels, increasing the *excitement* of them, and of every other power, enlarging the capacity of the thorax, &c. and thus performing a very full inhalation and exhalation

on of air, ~~while~~ they will partly co-operate.

This coughing is slight, or scarce any at all in the beginning, because in consequence of the Diathesis, as yet powerfully attacking the extremities of the vessels, the same fluids passing off in the form of an imperceptible vapour, very little irritate, and pass away with the breath, with little difficulty. Spits follow the same, because the humours accumulated together with their effect, which is the retention of mucus, are swept along in the effort of coughing, perhaps and the violent impetus of the effluent air, as if it were by a running stream, the blood sometimes mixed with these spits indicates the force of secretion already explained. The softness of the pulse, in the common acceptation of the word, in this case is to be excluded, as an indication because the symptoms of the pulse do not follow an inflammation, but the general Diathesis, which being regarded, the pulse
which

which is not very hard, may be called soft, but regard being had to the cure, the pulse may be called soft. Nor is the various sensation of pain, which is sometimes acute, and as it were pungent, and other times obtuse and heavy, and rather to be considered as an anxiety, altho' *directly* depending on inflammation, or indicating its state and seat, to be counted a matter of any great moment, because, however great the inflammation may be, wherever it may be situated, and whatever danger it may threaten, the only method of removing it, along with the danger of the disease, consists in removing the general Diathesis.

The notion therefore of the inflammation of the pleura pulmonalis in the acute peripneumony, or of the paranchyma in the obtuse, is to be rejected as useless, and guarded against as destructive, for very often during the course of the disease, when far advanced, the pain suddenly ceasing while the breathing is not proportionably

portionably lightened, affords a false appearance of a recovery to an unskilful physician. The cause of which being altogether different from the nature and seat of inflammation, consists in such a magnitude of *excitement*, as indicates that the *excitability* is worn out and ended, and the very great vigour changed into *indirect debility*; hence instead of a very great *excitement*, no *excitement* exists in the vessels mostly affected, and instead of density, extreme laxity takes place: hence the excretions, instead of being only moderately increased are augmented beyond bounds; the watery parts separating from the more fluid, without any force, without effects, but only in consequence of the inactivity of the vessels ~~and~~ the fluids, extravasated in all parts into air vessels, ~~which~~ suddenly suffocates the patient.

CARDITES seldom occurs, is not well understood, and appears generally to be a local affection, when this takes place; the physicians labour is spent to very little purpose

purpose, and if at any time it happens connected with the general affection, it admits of no other definition or method of cure, but that of peripneumony, from which, inasmuch as it arises from the same noxious powers preceding, and is removed by the same remedies, and cannot be distinguished from it, by any uncertain symptom; therefore it should not be supposed different from it, either in the origin of the disease, or method of cure.

The HISTORY of *the* SYNOCHA
PHRENETICA.

THE synocha phrenetica is a phlegmasia attended with a slight inflammatory catarrhal affection of some part or other, of one or more of the limbs or fauces, with pain in the head, the face and eyes suffused, impatient of noise, and light restlessness and delirium. Inflammation does not appear externally in its proper form; nevertheless, a state bordering on it or a catarrhal affection depending on the same cause, and differing only in this, that it is only an inferior degree, appears on the limbs, and muscles, especially over the spine or round the breast, and in the lower part of the fauces.

The pain of the head, the suffusion of the face and eyes, proceeds from too great a quantity of blood in the vessels of the brain, or its meninges, distending, stimu-
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lating, exciting and contracting the vessels, so as to cause pain. To create which, inflammation is not necessary ; for without it increased action may produce such pain, because it exceeds that medium of *excitement* in which an agreeable sensation consists. The quantity of blood is indicated and also explained from the redness of the face. That this causes the pain by distention, is proved by venesection ; and whatsoever diminishes that quantity, by lessening the impetus of the blood.

The same causes an impatience of sound and light, sharpening the senses of hearing and seeing ; for, as some degree of impulse of the blood is necessary for every sensation, if the vessels are over-loaded must it not be attended with heat ? as the blood put in motion is the exciting cause ; consequently, if the cause be too great, the effect must be equally so ; but these symptoms are attended with pain, in a different degree of *excitement*, as shall be hereafter mentioned.

The

The same increased *excitement*, caused by a too great stimulus of the blood and other powers, occasions restlessness and delirium. The other powers that contribute to the same, generally are intense thinking, as if it were a continual tenor of thought, and every exciting passion. No one, even in health, sleeps well when operated on by these powers. So that you should not be surprised that the same, applied in a high degree in a violent disease, prevents sleep. As increased restlessness is an increased action, so is delirium, the same cause remaining. What may seem wanting to the more full explanation of these symptoms, shall be hereafter delivered.

An EXPLICATION *of the* STHENIC
EXANTHEMATA.

THE sthenic exanthemata, are often the consequence of the noxious powers that usually create the sthenic Diathesis, in such a sthenic pyrexia, first, ~~and~~ a synocha, take place then, after a short interval, not certain by any rule blotches or spots that mark the skin follow.

The following is a strong proof, that the exanthematic disorders do not, in any thing of consequence differ from the other sthenic disorders, because, except in the eruption and the things appertaining to it, there is nothing remarkable or new in these signs ; except the contagion, nothing strange in the noxious powers ; and the same remedies are found to answer, both to check and cure the disease. As this is the case, yet on account of the eruption and the things peculiar to it, it was a proof of the greatest ignorance to have separated the

the

the exanthematic from similar disorders, and to have joined them with those very different from them in their nature. For how can any one believe since the usual method of cure removes the effect of eruption, whatever it is, that it proceeds not from the same but from a different cause, unless we are arguing with those, who think that the same effect proceeds from different causes? For truly the operation of contagion is not different to that of the common powers, but intirely the same.

Contagion is a certain matter, insensible, of an unknown nature, and, as most other things, only manifest by its more evident effects. Being caught by a sound body from the body of one affected, or from some coarser matter, as a garment, or household furniture, where it has by chance lurked; without any manifest change in the solids and fluids where it ferments and fills all the vessels, and then by degrees is excreted by the pores.

And

And as no effect follows it, except the sthenic Diathesis, the noxious powers that usually constitute this Diathesis, often precede the disease, and the asthenic cure always, and solely answers ; consequently its effect should not in the least differ from the disease hitherto mentioned. Therefore the diseases arising from the former are justly conjoined with those, as belonging to the same species.

The only difference betwixt them is this; that in the exanthematic, the matter requires some time to be carried out of the body, different in different people, consequently it is conveyed out in a more sparing or plentiful manner, the more free or obstructed is the perspiration; which is suppressed, not by any spasm or any constriction of cold, but by the Sthenic Diathesis on the surface of the body ; as is clear from this, because cold, by its debilitating operation, by affording a free passage for the matter, clearly restores perspiration. That it produces such effects,

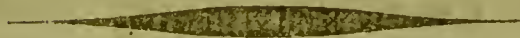
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not by removing spasm, but by lessening the Diathesis, has been demonstrated above. As the way for the offending matter is thus set open by a free passage, so, whatever part of it remains within the cuticle, acquires a certain acrimony, causes little inflammations, and when produced brings them on to suppuration ; which, by irritating the part affected, rouses up a Pyrexia and a symptomatic Phlogistic Diathesis, which is not to be confounded with the Idiopathic one.

The time of eruption is more or less certain, because the operation of fermentation, being in some measure certain and equal, requires a certain time also, to run its circuit, to diffuse itself over the body, and to reach its surface, witness the effect. Now, this is not certain exactly, because, the perspiration as the vigour varies, necessarily is more profuse or languid.

The

The pyrexia, symptomatic of eruption, sometimes assumes the form of a proper *Fever*, because the magnitude of the stimulus, which the eruption casts upon the whole system, begets too great *excitement*, consequently the end of the latter, is *indirect debility*.



The

The HISTORY of *the* SMALL-POX.

THE small pox is an exanthema, on the third or fourth day of which, and sometimes later, little papillæ break out very small, which soon pass into regular pustules, containing a fluid, generally on the eight day of the eruption, but often later, which is changed into pus, afterwards dried and falling off at last, in the form of scales; the eruption in proportion to the magnitude of the Phlogistic Diathesis is greater, less, or least of all.

All these things just now mentioned are directed by the laws of fermentation. The number of pustules, corresponding to the measure of the Diathesis, shew that contagion, without the noxious powers constituting this, are of no efficacy to create a real morbid state, and to direct only the exterior form of the disease.

The HISTORY of the MEASLES.

THE measles is an exanthema, beginning with a sneezing, moisture of the eyes, dry cough, and hoarseness. The eruption of which comes out on the fourth day or later, consisting of small papillæ, very numerous, scarce appearing above the surface, in the space of three days, or later, ending in furfuraceous scales. In the progress of the Phlogistic Diathesis, the disease is violent in proportion to its magnitude, and lighter when it is absent or less evident, nevertheless so as to turn out Phlogistic.

The sneezing, moisture of the eyes, dry cough, and hoarseness are catarrhal symptoms, and consequently depend on a Phlogistic Diathesis. Which inasmuch as they appear, and are perpetual four days or more before the eruption, that is to say, before the matter seems to touch the part affected, and from thence the Phlogistic Diathesis is to be supposed to follow

low

low after the noxious powers, which are accustomed to constitute it, and not the morbid matter, in this case, and to be necessary for the measles. Which, altho' it should be denied, and it be contended that these symptoms proceeded from such matter: Nevertheless it is to be admitted that it differs nothing from the other Phlogistic diseases, but to be equally placed in a Phlogistic Diathesis, and yield to antiphlogistic remedies; and because the matter brings along with it the same event, which the usual noxious Phlogistic powers do, thus it is altogether the same, and the cause of the disease ~~is~~ allowed to be ~~so~~. From whence there is nothing new in the intention of cure, but what is common to this with the other Phlogistic exanthemata, that time must be given to the matter whereby it may be expelled out of the body, and provision made after the same manner for the perspiration, as the Phlogistic Diathesis in other respects is accustomed to be treated.

The eruption admits of the same method of cure delivered, the disease is violent, when such a Phlogistic Diathesis precedes it, but when this is slighter the disease is light also, which thing besides confirms how the operation of the contagion does not differ from the noxious powers accustomed to constitute such a Diathesis.

When the Diathesis by increasing suppresses perspiration, the eruption vanishes often for a time, as if it went to the interior parts, which danger is mostly threatned in the end of the disease, and shows that the matter kindles up a symptomatic inflammation, after the same manner that the variolous matter does on the surface of the body. Hence often the lungs are inflamed with other *viscera*. Which inflammation is said to be symptomatic, because the acrimony does not depend after the manner of the *Idiopathic*, on the common Diathesis but of the matter, one time attacking one part, and one time

time another, the effect of which excites also a symptomatic pyrexia, which is to be distinguished from the *Idiopathic*.

The HISTORY of the SEVERE
ERYSIPELAS.

THE Erysipelas is a phlegmasia always beginning with a pyrexia attended with an inflammation. Which when seated in any external part of the body, often in the face, sometimes in the neck, is red of an irregular margin, swelling a little, spreading and as it were burning.

There is a property peculiar to this inflammation, which is different from the other common sthenics which name has been given to all those depending on the sthenic Diathesis to distinguish them the better from the others, viz. this property is to occupy the mucous system. Why that

that should happen, it is of no importance, since this does not differ from the other phlegmasiæ, neither in the operation of the noxious *exciting* powers, nor in the operation of the remedies.

The cause of the redness, of the inflamed parts, is the superabundance of blood in the inflamed vessels; for the question, of the more or less red inflammation, as it touches not the nature of the disorder, is of no consequence here. The place inflamed swells less, because there is a free space between the cuticle and the skin, by which means the fluid concerned is diffused. This is the cause of the spreading of the inflammation, and irregularity of the margin. The burning sensation arises from acrimony brought on by stagnation.

This inflammation is not more dangerous in the face, than in any other place, except in a great Diathesis, on which it depends, causing the inflammation to be
great

great in proportion. In which case whatever part is inflamed, the disorder is to be judged off from the great Diathesis, but still more so from an inflamed face, if attended with great inward disturbances.

When such a sthenic Diathesis, and its dependant, an affection of the head, takes place, no disorder is more dangerous, none more rapid, nor sooner bring on a dissolution. On the contrary in a mild Diathesis, no disease is less dangerous.



The HISTORY of the RHEUMATISM.

RHEUMATISM is a phlegmasia, taking place in a temperament inclining to the sanguineous, in consequence of heat succeeding the application of cold, or so alternating with it, as to stimulate with greater power, attended with a pain near the joints, especially of the larger ones,

ones, and corresponding to the magnitude of the Diathesis. In which the inflammation always following the pyrexia.

A sanguine temperament, consists in that state wherein sensibility, and the powers of body and mind, are easier excited by a given quantity of stimulus, than in any other, which depends on accumulated *excitability*. Hence all the other conditions being the same, younger persons, the sum of whose original *excitability* has been less exhausted than that of old people, possess this temperament in a more exquisite degree, but as any temperament is seldom unmixed, so this is seldom pure in a rheumatism. This is confirmed by the application of stimulating powers, in the highest degree, constituting this disease by a Phlogistic Diathesis, in a person of any temperament: And the more so, because whenever this temperament is unmixed, as is the case in the hysteria and phthisis pulmonalis: the disease arising thence from stimulating

stimulating powers, inclines to *debility* rather than strength: and also the *rheumatism* never happens to people that do not possess this temperament, without violent stimulants, which necessarily bring on other Phlogistic diseases, but never *rheumatism*.

External temperature proves hurtful, after the same manner in this case, as has been explained in page 24, Vol. II. and 27.

The pain is violent in the places mentioned, because the inflammation, or the more increased part of the general Diathesis affects these parts more especially. And thus happens on this account, because the temperature mentioned, which is the most powerful of all the noxious powers, is directed only to that part. Inflammation is not transmitted to the interior parts, because the same noxious power does not act on the interior in the same manner, these parts maintaining most commonly an equible temperature,

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independent of all external changes. Cold, as is the general opinion, does not do hurt here by astringent, because the disorder rages mostly after the application of heat, whose operation is opposite to that of astringent, which is confirmed by the noxious effects, which always follow stimulating food ; and also by the utility of abstinence in this disease ; which also refutes the error that attributes more harm to temperature, than it really affects, and and more advantage to sweat, than it really does ; as if all the other noxious powers were of no signification ; and as if the other remedies were of the same. In this, as well as in all other Phlegmasia, the general Phlogistic Diathesis alone constitutes the disease, and the solution of this Diathesis alone constitutes health, which is very clearly proved by the inflammation in this disease, which exist very often single, and in both cases have nothing common with the Phlogistic Diathesis, in which all the disorder is centered. We should remember that these are local affections,

fections, or belong to a general disease of a different nature, viz. the rheumatalgia, which shall be ~~hereby~~ ^{herein} considered.

Why the larger joints are affected in this disease, and the smaller in the gout, I shall endeavour to explain when I come to treat of that disease.

The rheumatalgia, which is an asthenic affection, is not to be confounded, as has always been the case till now, with rheumatism, which is a Phlogistic disease.

The E R Y S I P E L A S

Of the M I L D E R K I N D.

THE definition, as well as the explanation given above of the severe Erysipelas will suffice to explain the mild one; yet in such a manner, as to let us understand that both from the noxious antecedent powers, as well as from the

P 2

symptoms

symptoms and the whole cause, this latter is much more lenient than the former, as also the disorder in the first place, is not so severe.

It does not often so much follow the cynanche sthenica, commonly called cynanche tonsillaris, as it attends it when not yet ended. It often happens alone, without the latter arising from a similar mildness of the noxious powers, and is attended with a less degree of symptoms during the whole course,

Even from the same powers in men in the same state of the noxious powers, at one time the erysipelas, at another the cynanche, ~~that~~^{as} the catarrh arises without any distinction, and these same are cured by the lenient asthenic method of cure.

The HISTORY *of the*
CYNANCHE TONSILARIS.

THE Cynanche Tonsilaris is a phlegmasia, wherein the inflammation attacks the fauces particularly the *tonsils*, but never goes before, but always follows a pyrexia. These inflamed parts are turned and red, the pain is always increased in swallowing, particularly fluids. The cause has been assigned, why inflammation attacks the place here mentioned. Which when it once happens, the same places are in danger of being affected with it, often because its seat being prominent, and not covered, are exposed to the most powerful of the noxious causes, and the vessels once distended with inflammation, and relaxed afterwards, admit of an accumulation very easily in every violent impetus of the blood.

As after the manner of other phlegmasia, the inflammation never precedes the pyrexia, for the reasons mentioned, in page 83, Vol. II. So

So if it should appear to an unexperienced person to go before it. The reason of this is, the general inflammation being often repeated, and leaving its noxious effect always in the same place. It by degrees degenerates into a local affection, which thing cannot happen without a Phlogistic Diathesis, and without a *cy-nanche* following, but conjoined by chance with the former, it may sometime precede the latter, but in both cases it is to be distinguished from a general one, by any man that wishes to guard against a pernicious error in the method of cure. The same affection in an asthenic habit, either succeeding a general affection, or otherwise becoming now a second time generally is to be referred to a disease of the other species, hereafter to be mentioned.

If you can explain the cause why the pain is exasperated in swallowing fluids, do so, but if you cannot, it does not matter much.

The

The *cynanche* œsophagea is here omitted, because the disorder is very rare, and whenever it is a general affection, admits of the same explanation and ^{method} method of cure that the *cynanche* tonsillaris does. Nor does it differ, only that the inflammation is higher, and some redness only appears ; but because we ought to suspect that the affection is local, as when the œsophagia happens to be eroded, or as if it were burned by any acrid stimulus, consequently look to the distinctions made before, in page 95, &c. in Vol. I. and distinguish them in order to affect a cure.

A disease which very seldom occurs, but sometimes may be seen in certain countries, but never at all in others, is called the croup in which the respiration is affected, the inspired air makes a rattling noise, a hoarseness takes place, this cough has a peculiar and clangent noise, and the inflammation, or tumor is scarce visible, this disease attacks
infants

infants and those of tender age, all the other accounts of it, admit of doubt, ~~Of~~ which disease, which I have not seen myself, ~~From~~ ^{form} this the following opinion of it when it occurs to you in practice, as a Phlogistic Diathesis such as is required to constitute a disease of any great magnitude, because such a Diathesis requires a great *excitement*, it takes place less in infancy, or old age, in the former the magnitude of *excitability*, in the latter, the smallness of it not at all admitting of a great effect of the *exciting* powers, or force of *excitement*; but nevertheless neither of the two states can be said to be totally exempted from such *excitement*. In infancy the magnitude of the *excitability* makes amends for the smallness of the stimulus in old age; the magnitude of the stimulus, on the contrary, supplying the defect of the *excitability*, which may be sufficient to cause a *Phlogistic* Diathesis, not very continued, but however of some magnitude, so as to amount to a disease. By this means children experience a wonderful

derful vicissitude of *excitement* in the shortest space of time: to-day they shew all signs of extreme *debility*, and to-morrow every symptom of vigour, in consequence of the operation of the stimulus being easily raised to the highest degree, by reason of the magnitude of the *excitability*, and which soon changes to the lowest, on account of the smallness of the stimulus; hence, whenever children are attacked with a Phlogistic disease, that becomes of short duration, acute, and easy of solution, nor is an asthenic disease in them more difficult to be removed, provided there be no local affection in the case, and a proper method of treatment applied.

The Indications of the former species of disease in infants consist in very great frequency of pulse, if compared to the Phlogistic pulses of grown up people, and more frequent than their own pulses, when in health, sensibly striking the physician's finger.

The belly, in the beginning of the disease is bound; as the disease advances it becomes looser, attended with a dry skin, heat, thirst, restlessness, strong crying, &c. The symptoms of the contrary species of disease are innumerable pulses very small, imperceptible and softly impressing the finger, as snow falls, a loose belly, with green stools very abundant, frequent vomiting, dry skin, a heat greater than natural, different in different parts of the body, interrupted sleep, never refreshing; the screaming feeble and mournful. Besides the usual noxious powers,^{are} undiluted milk, or food prepared from animal matter,* too large a use of opium, or strong drink after cold and moisture, and consequently more *debilitating*. Too great heat, strong simple solids precede the former Diathesis. Together with the well known noxious powers, the milk of a feeble morbid nurse, food prepared from vegetable aliment, and mixed with sugar or water, and watery drinks; the practice of purging up or downward, by any medicines,

dicines, or even by magnesia, given in order to absorb acids, cold not followed by heat and weak simple solids, precede the latter Diathesis.

Consider which of these two kinds of symptoms precede or attend a cynanche trachealis, and whether its pyrexia be Phlogistic or asthenic; weigh well the different opinions which different people have given on this. Suspect their reasonings very much, but suspect their facts more. Guard against the ostentation, vanity, and rashness of the younger physicians, and the obstinacy of the older, hardened by age and by practice, which can be forced by no reason, by no truth, however weighty; scarce by money itself. And guard against a mind fettered by prejudice; remember in the instance of the *Alexipharmic* physicians, that all those of a century were in error except one,* and consider whether the present race of physicians, who follow the doctrines of the schools, are more in the


Q 2 right

* Sydenham.

right, and do not err in the other extreme, and do as much harm in *Fevers* and diseases of pure *debility*, as the former did in Phlogistic diseases, and scatter destruction far and wide thro' all mankind. Thus being guarded from error, consider the methods of cure in this disease, which have been made public. If by these, or by any experiments made by yourself, you discover that venesection and purging, or what, on the contrary, are called *Antispasmodics*; that is to say, stimulants answered, you may be assured that in the former case, the disease is Phlogistic, and in the latter asthenic, and the more certain you may be, if you observe the noxious *exciting* powers, or the symptoms already mentioned, to agree at the same time.

The HISTORY of *the*
SIMPLE SYNOCHA.

A Simple Synocha is the same disease with the synocha Phrenetica if you take away the affection, or increased *excitement* of the head.



The HISTORY of CATARRH.

CATARRH is a *Plegmasia*, (page 89, Vol. II. wherein besides the general symptoms a cough takes place, hoarseness and an increased excretion of the nose, fauces, and bronchia, first suppressed afterwards a little increased, and at last very much augmented, arising from the noxious stimulating powers, often from heat alone, (page 90 and 91, Vol. II. particularly after the application of cold, which may be removed by *debilitants*, often by cold, taking care that heat is not applied after it.

The.

The explication of the cough, is the same as has been delivered, page 95, Vol. II. Which is more free, because it exasperates and irritates no neighbouring part, highly inflamed, &c.

You may know from this, that the hoarseness arises from the suppression of the vapour, which inhales into the bronchia, because it continues very long, often almost without being attended with expectoration, &c. or at least when these continue moderate, the Phlogistic Diathesis continuing in vigour, and when this Diathesis relaxes a little, and the spitting and coughing becoming more free, the hoarseness relaxes or subsides. That this is effected by such a stimulus, as produces a Phlogistic Diathesis, is proved by exertion of speaking, causing a temporary hoarseness by silence, removing this hoarseness, and the use of cold water allaying it.

It proceeds from suppressed excretion of the mucus and exhalable fluids, as mentioned,

mentioned, in page 94, VOL. II. and admits of the same explanation as there delivered.

It appears from this, that stimulants cause a Catarrh, because heat alone, strong drink, moderate exercise, certainly excite it, and cold air, and the use of cold water, low diet and rest certainly and effectually remove it. To suppose then that it proceeds from cold alone, and is to be removed by heat, is a great mistake.

On the other hand, cold never does harm, except when it is succeeded by the action of heat as proved before, in page 21. VOL. II.

The Catarrh, which happens so often in summer, where its cause cannot be imputed to cold in one case, out of six-hundred can be explained from heat, is never contagious very often, general and requiring the application of cold for its cure; not at all succeeding cold, but forthwith succeeding

succeeding heat, facts well known to old women, and to the commonest mechanics, in like manner to bleer-eyed people, and to barbers, I say, these facts are known to them, but unknown to medical writers, and medical *Teachers* which confirms the same observation.

How far many diseases which have been, and are counted as phlegmasia may have a Phlogistic Diathesis accidentally conjoined with them, of this, we must judge from the doctrine already delivered. And how far they are distant from the same, and are to be considered as local diseases in every respect, is to be referred to another part of this work.

The HISTORY *of the* SCARLET
F E V E R.

THE Scarlatina is an exanthema, about the fourth day of which, or later, the face is somewhat tumefied at the same time, and the skin every where effloresces, and afterwards is discriminated by large spots that afterwards coalesce and pass in about three days time, into scales like dander. Which proceed not but after a Phlogistic Diathesis brought about from some other cause, which brings on a contrary disease, afterwards to be mentioned.

The eruption coming on at a certain season, and continuing for some time, is to be attributed to fermentation, requiring after the same manner a certain period, different in different diseases, as has been explained.

The tumidness of the countenance depends on a higher degree of Phlogistic
VOL. II. R Diathesis

Diathesis in that part than in any other equal part, with the contagious matter now coming to the skin. Over and above the noxious powers that are accustomed to constitute ~~that~~, I say is supposed to increase.

This matter alone creates nothing of the morbid state, and only gives the exterior and exanthematic appearance of the disease, and follows the nature of the Diathesis, whether it be asthenic or Phlogistic. Hence, after its application to the body, a disease, one time Phlogistic, such as has been defined, another time asthenic arises, which is to be mentioned in its own place afterwards: ^{with} ~~What~~ reconciles both the different explications, as well as cures of different writers, maintaining different opinions, and contending diametrically against each other.

The HISTORY of *the* MILD POX.

THE definition of the mild pox, is the same as that of the severe, except that in the mild kind, the pustules are very few, never exceeding one or two hundred in number, ~~except perhaps one or two.~~

The number of pustules and the eruption attached to them, is not caused by the nature of the contagious matter, nor is it redundancy, but by the sthenic Diathesis, as much as it is roused by the sthenic noxious powers, of which the matter does not participate. If therefore that Diathesis, and particularly in the surface of the body, be guarded against, and ^{especially} ~~particularly~~ on the surface of the same, the eruption will seldom be dangerous.

As the contagious matter contributes very little to the sthenic Diathesis, for the

reasons mentioned above, so it notwithstanding contributes something; which is proved by the frequent eruption ensuing and increasing, where the Diathesis, after the admittance of the contagion, is not increased by the common noxious powers.

Consequently, while the *excitement* is to be reduced below that which is suitable to sound health, yet there are certain limits, beyond which we must not proceed by *debilitating*.

For, where the sthenic Diathesis is very much reduced, the *excitement* is too much diminished, the eruption becomes very red, extended over the whole system, and from a spotted one falls off always into a confluent eruption, unless it be cured by a stimulating method, it will be pernicious, and is intirely unlike the eruption of the pox.

The HISTORY *of the*
MILD MEASLES.

THE definition of the mild measles, is the same as that of the severe kind, to which, whatever has been said of the mild pox may be applied, if immediately on the commencement of the Catarrhal symptoms, the sthenic Diathesis is dissolved, no inconvenience proceeds from their number, and the disorder proceeds in as mild a manner, as even the mild pox, when treated after the same manner.

The Catarrhal symptoms are of the same nature as in a Catarrh, and admit of the same cure, viz. the asthenic one.

The Catarrh, and the simple synocha, are void of a proper inflammation, whether common or local. The Scarlatina, pox and measles, (when these two latter are of the milder kind) are destitute of common inflammation, and shew the local one on the surface, which is of no consequence.

HISTORY

HISTORY *of* PHLOGISTIC APYREXIA.

PHLOGISTIC Apyrexia proceeds from too great a Phlogistic Diathesis affecting the vessels, but some particular part more remarkably; particular examples of this are, mania, pervigilium, and obesity.

The HISTORY *of* MANIA.

MANIA is a Phlogistic Apyrexia, wherein the mind (disturbed) conceives false images of all things.

As far as mania does not arise from an injury of the matter of the brain, which local case sometimes happens, too great exercise of the mind, or the power of the affections violently exciting, chiefly excite it; which, nevertheless, act as more
especially

especially on the brain, so on the whole body too, more or less, though a pyrexia should not follow; because, the method of cure debilitating the whole system, and other stimuli, not by attacking the brain immediately, but exciting the same disease: the most powerful of which stimuli are spirituous liquors or wine, and perhaps some things taken into the stomach, and acting there first. Of the other Phlogistic noxious powers, others alone bring on a mania less; but nevertheless, by stimulating, increase the force of the noxious powers, which the effect of the same, removed by the cure proves. If at any time poisons should create Mania, the matter of any solid part remaining unhurt, the operation of them is supposed to be the same as of the other common stimulant powers, the effect is to be judged the same, and the *Idiopathic* disease is to be supposed also the same. Which very things, if they act contrary, by destroying the texture of the part, are to be counted as the origin of a local disease.

In the mania, the heart and arteries are moved less, because food, which is the chief noxious power stimulating the vessels, is accustomed to approach less to the number of noxious powers, ~~that~~ ^{that} which is added to the rest proves noxious, appears from this; that abstinence is found of the greatest utility among the other remedies. From what has been said, it is evident that mania is not a local but a general affection.

P E R V I G I L I U M

IS a Phlogistic Apyrexia, in which there is either no sleep, or an unsound one, in which the patient is troubled with false perceptions.

The same noxious powers excite sleep, which excite mania, but less in degree; which too much thought, commotion, or
 perturbation

perturbation of mind manifestly constitute. That degree of thought, which affects this, is not of very great magnitude which would affect it by consuming the *excitability*, and bring on profound sleep in time; or would drive away this by means of *indirect debility*, which is foreign from this place. The measure of the perturbation of mind, as far as it excites this disease, is the same; too much of which intirely ends at last either in sleep, or produces that degree of watchfulness, which contains *indirect debility* as a cause; nor does the simple operation of these effects of mind and body, happening seldom, prove equal to the effect. Which would be thus lighter or shorter, than to deserve the name of a disease. Should the irritation return or oppress the brain greatly, it consequently would leave a noxious power, which would create a more remarkable disease. The desire of great things by this means, when danger is conjoined, the impetus of revenging vio-

lent injury, the horrou of revenge completed, the fear of future atonements, are shewn to move the excited mind, by the examples of *Catiline*, *Orestes*, and *Francis Spira*, &c. Therefore, as often as the mind is excited by images or affections, as after a certain continuance of these and other stimuli it cannot rest and be composed to sound sleep, so often the disease in question is judged to be constituted.

Which disease, as the noxious powers mentioned in page 138 Vol. II. do not alone constitute it; for, as afterwards will appear, when the powers contributing to pervigilium, which act chiefly by debilitating, in the end, will be treated of, and consequently will be found under the other species of diseases. I say, those powers will be found to be ranked amongst the other things which tend to prevent sleep. The operation of the latter powers being contrary to the operation of these which procure such; being less in degree than those that quickly wear out the *excitability*.

Thus

Thus the remission of usual exercise, watery instead of strong drink, no banquetting beyond the usual course, whereby the stimulus of food is hindered to proceed to that extremity wherein *indirect debility* favouring sleep happens, and cold, which acts in like manner, by hindering otherwise the sum of the stimulus to exceed bounds. All these things create watchfulness, or a state bordering on sleep, whether alone or more especially added to the proper stimuli of the brain. When the powers actively stimulating (page 139, VOL. II.) by this means, no part of the sum of the stimulus being diminished, create a pervigilium; hence the cause of the Phlogistic species of other diseases page 27, VOL. II. is the same. With this the state of the body is said to be the same in both: wherein any disease is situated, nor are any other noxious powers understood, but altogether the same, to proceed by the proportion of the magnitude only varying in degree which happens often in other Phlogistic diseases.

Which circumstance is also discovered from 'the state of the functions, from which, altho' these disorders may be said to belong to apyrexia, nevertheless the pulsation of the arteries are not altogether free from the disease. On the contrary they are more powerful than in health, or what takes place in Phlogistic diseases, and the state of *excitement* is in proportion to that of vigour and the state of the other actions, and except in such as labour under an affection of the brain is the same, which generally is the case in the milder Phlogistic ~~disease~~ ^{diseases}, or predisposition to these; but if the brain in this case is more affected than other parts of the body, as in mania, that circumstance has nothing unusual in it, inasmuch as ~~it~~ ^{truth} must be invariable, &c. That a certain part is more particularly affected in these diseases and predisposition to them than in any other equal part has been before fully proved, &c.

The HISTORY of OBESITY.

OBESITY is a sthenic apyrexia, in which from sound health by high living, particularly on flesh meat, as also from a quiet kind of life, the quantity of fat increases so as to incommode our actions.

That obesity thus defined is a disease and even a sthenic one, is clearly demonstrated by the definition of a disease, page 65, VOL. I. and by the certain indications of the sthenic Diathesis, desire of food, strong action of the stomach joined to the strength of the other powers.

And as in this disease the stimulus of the *exciting* powers, raises the *excitement* above what is proper for sound health, to that in which the sthenic Diathesis consists, without which that great force of the stomach and the organs which produce both chyle and blood, could

could not exist; so it is common to this with the other disorders of the sthenic apyrexia, viz. that the sum of all the stimuli should ascend much less, than in the other diseases of the same species, viz. with a pyrexia, and an inflammation, never to an extreme degree of magnitude, whence *indirect debility* takes its origin; and indeed there is not as much as would suffice to rouse the heart and vessels to any such a height.

To all which notwithstanding it happens that these and all the other actions arise some little above the degree of those that are attendant on health, and very much above the asthenic Diathesis. The sthenic apyrexies differ in this chiefly from the other sthenic diseases, that the *exciting* powers exist within that degree of magnitude, which consumes the *excitability* very much; as we learn by their certain effect. For these disorders are much more lasting than the other sthenic ones.

Whence,

Whence, howsoever the brain be affected by its peculiar stimuli, or its vessels by the redundancy of blood; yet unless that redundancy approaches which the other stimulant powers create nor the *excitement* arising from thence; it is evident that the common effect will be much less, and that the force of all the powers joined together, is much stronger than the force of each peculiar one when separate.

The Diathesis therefore of the whole system is in the end less in these disorders than in the other sthenic complaints; tho' the Diathesis of the part is still greater than in health as of the brain in the mania, and pervigilium, and of the sanguiferous vessels in Obesity; and the whole Diathesis is almost as great, as it is vigorous in a predisposition to other disorders, and more so in the part affected. Hence it comes that the contrary to the nature of these disorders, and in like manner for a predisposition to them, takes place and they usually for that reason continue

tinue long because the mediocrity of the
 of the ^{same} ~~sum~~, stimulating operation never
 consumes the *excitability* quickly, and al-
 ways causes an *excitement* more than ne-
 cessary. A great disturbance of the brain and
 vessels in these disorders does not argue a
 great degree of *excitement*, because a local
 affection compared with an *Idiopathic* one
 is *toto coelo* less. For however any
 stimulus may press on a part, and thus
 excite the rest of the body, yet unless
 the other stimuli applied to the remainder
 of the body, support its operation, that
 the sum of the operation of all may affect
 the whole system more highly, the effect
 of that one stimulus will be only conspi-
 cuous in the part, and less so in the rest
 of the body. In fine remember (page
 80, &c. VOL. I., and page 10, 11, &c.
 VOL. II.) that every grievous disorder
 always arises from *excitement*, which took
 its rise from the conjoined force of many
 stimuli.

As in these sthenic apyrexies a certain
 part, in the two former, the brain in the
 latter ;

latter; the sanguiferous vessels are much more excited than the other parts, and in a greater proportion than in the other sthenic diseases, for this reason, because the local affection is much less supported by the stimuli not operating immediately on the other parts; so the stimuli, thus operating on the parts affected are supposed, though only in an inferior degree, yet really to affect the rest of the system. That the thing is so, is confirmed by the absence of the asthenic Diathesis, and by such a sthenic one as manifestly in this case contains a predisposition to other disorders of this species, by the remedies *exciting* these, which will be directly made manifest, and the cure is affected by powers contrary to these, which are always noxious in an opposite disease. Whence whatever stimulus affects a part, it truly and certainly affects the whole system, because the *excitability* is one and indivisible over the whole, and even in this case where it cannot be discerned so clearly *it is evident.*

As to what belongs particularly to Obesity, you may know it by this clear proof that all the other noxious *exciting* powers except food, in such people are more or less prevalent, because the concoctive powers, which depend on the force of the former, are so strong, as to perform their duty more perfectly than in others, which notwithstanding are not possessed of the weakest force. Which noxious powers notwithstanding their being kept within that degree of magnitude which approaches to extremes, or very near it and finishes the *excitement* by consuming the *excitability*, or through the multitude of the commotion which exhausts the system; yet these noxious powers, I say, are very powerful or lay a great stress on the *excitability*

The affections of the mind do not stimulate much in this case. Which is commonly known by the old saying, that fat men are of a mild temper; when those that are lean are very morose. Thus fat people are not given generally to much thought,

thought, which is a great stimulus. Hence also those that are naturally fat, are averse to exercise by which the action of the vessels should be roused, and consequently perspiration would be set free, and the more so, because all motions fatigue them more than others. Hence the fluids that would be cast out through the pores of the body are retained.

Having now laid before you the properties of these diseases, since every local affection depends on the common one 'tis of the same nature, arises from the same noxious *exciting* powers and is cured by the same remedies, varying only in degree. Hence the local affection, whether it be an inflammation, or a greater affection of the brain, or of the vessels, than of any other part, yet we must not think that it is the same in one case, and different in another, but intirely the same in every case, and that they differ only in some small matters of no consequence, and that they by no means require a different cure, or

deserve capital distinctions; therefore let that error, which has totally corrupted this art, be intirely destroyed. All the diseases consequently of which we have treated, have rightly been reduced to two genus, not to the genera and species at all, as there are only two forms of diseases.

Now as in all these diseases all morbid force, whether it be considered as *Idiopathic*, or local, produces too great *excitement*, and as the remedies that cure the former, cure also the latter, nor are they ever to be applied to a part only; all this reasoning is made use of that we may be convinced that there is a certain series of increasing strength, from the most sound health, to the greatest degree of a sthenic disease. In which series the Peripneumony or Phrenitis are at the head, and Obesity at the foot.

These on the higher part of the scale are followed, nay sometimes equalled by the small pox and measles of the severe kind.

kind. The Erysipelas, attended with a great pain of the head, next is superior to them in such a manner, as to dispute precedence with them in violence. To which succeeds the rheumatism, often equal not in the magnitude of the danger but of the Diathesis. The next is the mild Erysipelas, which claims an equal place with the Cynanche Tonsillaris, but in the mildness of its nature more nearly allied to the latter than the former. These are the diseases attended with a pyrexia and an inflammation.

Two of which occupying the lowest place of the series, viz. the mild Erysipelas and Cynanche Tonsillaris, are so like to the sthenic Catarrh, a disorder void of inflammation, that out of e'm all, one cannot tell which to put in the first place, yet below these the simple synocha and scarlatina, inasmuch as this latter is sthenic, and as much as the most usual state of both is thus considered, are clearly to be so placed. The lowest place of all
in

in the series, is occupied by the gentle pox and measles of the same mild nature.

In this whole series, the titles mentioned and their names are not so much to be considered as the morbid force. For the manner of the cause which is certain, not that of the symptoms, which is uncertain and fallacious is to be considered. The investigation of the symptoms, which hitherto has been of no advantage, but of great detriment to the art, and the most copious source of capital errors, is also in medicine, as in the rest of Philosophy, that question of hidden causes is to be rejected, to be carefully shunned and avoided, and nosology is to be condemned.

Under these disorders lately mentioned the Mania, Pervigilium, and Obesity are to be placed. Below these, and above the other disorders, entire sound health is to be fixed.

The CURE of the DISORDERS of the
STHENIC FORM.

IN order that the method of curing the sthenic form of diseases may be the better reduced to practice what we have before proposed, must be applied first to the most violent Diathesis, then to the more light, and to the danger of the parts affected in such a manner, as to attend only to the powers of the remedies.

When therefore a violent Diathesis, as in the peripneumony, the phrenitis, measles, and Erysipelas gravis, attended with an affection of the head, is observed, immediate recourse must be had to the most powerful and quickest remedy, and in proportion to the violence of the disease, must the quantity of blood be taken.

No certain quantity, on account of the changes of the powers of life being different in different people, as they vary in age, sex, strength, and in the different
magnitude

magnitude of the noxious exciting powers can be pointed out.—In the puerile state, which is seldom afflicted with any of the above mentioned disorders, except the measles, and the less ~~of~~ the farther advanced, who are in less danger than in the bloom of youth; therefore a more sparing venesection suffices, because the cause of diseases in both ages is little *excitement*, for in the former there is magnitude of *excitability*, and in the latter a necessity of a greater stimulus or exciting power than before, because the *excitability* is much impaired.

A more certain rule to go by, in order to ascertain when a sufficient quantity of blood is taken, is an abatement of the symptoms, or a temporary removal of them. Wherefore, if after venesection, immoderate heat, hardness of pulse; if the affection of the head or lungs, if the dryness of the body, are much abated or relaxed, and a more moderate temperature, a greater softness of pulses, and a less quickness of them takes place, and the
surface

surface of the body be more moist, at least less dry, if the pain be every where abated, the inspiration eased, and the delirium taken off; we may know that enough of the vital fluid has been taken, at least for a time.

In order to obtain this advantage in a strong vigorous period of life, X. or XII. ounces, but much less before and after, will be generally found sufficient: Which rule is good, but as it answers not in every case, we must have recourse to that, as the more to be relied upon, which procures a considerable remission and relaxation of the symptoms

Since a local affection depends on the magnitude of the Diathesis, consequently you must remember that there is no need of any peculiar directions for it, but such as are applied to the general disease.

This being done, and the violence of the disorder being broken, we must then

pass on to purging, the next remedy in practice. To effect this, violent cathartics must not be had recourse to, such as many formerly used, because their stimulus, attending the first operation, may be hurtful; but gentle purging, such as by neutrals, and particularly real Glauber's salts, which are great debilitants, and draw off a great quantity of fluids from the vessels: As in the last century a very prudent man prescribed these, along with venesection, every other day; so, if per-chance such a disease should attack us, there is nothing to hinder us from using them on the same day.

Purging, after a small venesection, is more efficacious to remove the Phlogistic Diathesis than any great letting of blood whatsoever alone; because, as we said before, the power thus *debilitating*, which always debilitates more in the place where it is immediately applied, operates here in many places, not only in the greater sanguiferous vessels, but in most of their terminations, and the *excitability* is more
universally,

universally, consequently more equally affected, and the *excitement* is more efficaciously diminished.

Together with these remedies, we must refrain from all food, except vegetables, likewise from all liquors, except watery or those mixed with acids. Which precept does not seem so much neglected in words, as in reality and custom, because, what was thought to be slight, transient and of no consequence, as it were, has been usually given under this title of administration, in order that its efficacy might not sink deep in the mind. No stimulus is more powerful or more noxious than that caused by victuals, consequently whatsoever blood is drawn, or if the serous fluid be detracted from the bowels unless food be avoided, all these may be used in vain. From this consideration, fluid matters notwithstanding vegetable food, should not on this account be forbidden, because the watery matter retained in the system, but easily

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penetrating the least vessels, flows through the different extreme bounds, and supports the strength and augments the utility of another remedy, which we shall just now mention.

Do not forget to have in view along with the first letting of blood, and first purge, as also abstinence, with water for drink, the temperature, which must be particularly considered. For if cold always, and from its peculiar operation *debilitates*, if it seems otherwise to operate, because a succeeding or alternate heat changes its effect into a stimulant one, if it alone cures the small pox, or prevents their violence, if it be the best remedy against a Catarrh, and where heat is avoided, is of great use in every sthenic complaint, we cannot doubt, but this same cold is very advantageous in disorders of a very violent sthenic nature.

Thence its operation is not different in the pox, and different in the other
sthenic

sthenic diseases, but, intirely the same. Moreover as in all disorders of this species, cold alone is often sufficient, so whenever the Diathesis, as in those disorders we are speaking of rages extremely, it demands immediate help, because all delay brings on precipitate danger; because the above mentioned remedies are sufficient to remove the disorder, as we have found to be true by practice, and that cold, which would effect the same is neither at hand, or cannot be administered by every body; and its utility is too great to merit the credit of many, for these reasons we must not desist from the proposed method of cure and consult for the good of the person afflicted, by throwing off the blanket and the other cloaths, and choosing for the most part in place of a bed or squab, a cool room, and thus the magnitude of a short duration compensates for the long continuance of a less degree of the same power.

Since

Since such is the operation of cold, page 131 &c. VOL. II. as to have the power of transmitting inwardly the eruption in the measles which is falsely attributed to it, as the cause is not to be ascribed to cold alone, but to heat and other stimulants, thus *exciting* more, than if they never had succeeded it, as we have explained, VOL. I. page 67. And why not? If cold does not drive the eruption of the pox inwardly, but after enlarging the diameters of the perspiratory vessels, gives passage on the contrary to the matter, why in a similar case should its operation be thought different, nay even contrary? Is that false notion now to be refuted, which supposes that the same cause produces different effects? We allow cold lessens the eruption in the small pox. The same causes it to disappear in the measles. What then? examine the truth more narrowly. Are we to think that its effect is the same, or different in both cases? How comes it that from its disappearing you are certain
of

of its being driven inward? By what proofs will you support it? Confess the truth. Acknowledge with sincerity that these errors are the other remnants of the Alexipharmic doctrine, which supposes that heat and other stimulants assisted and cold obstructed perspiration. The error of which doctrine both in the pox and other cases, has been proved by an illustrious man*; because it did not admit of the same method of cure for the measles, and for that reason you do not admit of it, who does not depart from, nay but adheres strictly to the said error. But you can see, when the proper method of cure is applied, that the measles as well as the pox are Phlogistic. Are not all debilitants or *antiphlogistics* very successful in both cases? And as it is manifest that cold in the pox is a debilitant, or as you call it a sedative. Have we not reason to suspect that it is not a stimulant or an astringent in the measles, and that thus it repels the eruption, but that its operation is the same as in the pox. In this case
you'll

* Sydenham.

you'll contend the peculiar operation of cold, because after the eruption hath disappeared, all the symptoms become more violent. Yet consider whether this will do any thing for you, whether any thing at all, or not quite the contrary. Is a stimulant or debilitant effect the consequence of the operation of cold? one of which you seem to think. If the former, the cause of the disorder is to be imputed to it; which, as will be hereafter proved, creates a too great *excitement*, after cold and more even than if it had not been applied, if the latter people will suspect that cold is a part of the cause. But it is not so. And whenever an increased Diathesis is the result of the operation of cold, the reason is, because the stimulus of heat and other *exciting* powers was not sufficiently guarded against. Which is clear from the application of heat ordered in stead of being prohibited in your method of cure. And no wonder why. For if the cause of a catarrh has so much deceived physicians, the Catarrhal symptoms

symptoms of the measles have necessarily deceived us as is proved in the history of Catarrh and simple Synocha. And if the errors of a rejected doctrine are retained in one case why not in others?

The RENEWING of the CURE.

AFTER the application of the remedies mentioned in page 158 and 164 VOL. II if the symptoms return, the same method of cure must be re-entered on, venesection must be conjoined, purging renewed, and the body must continually be kept cool, and reduced through low diet, and all those things are to be pursued until the multitude of symptoms be abated, and health, at least protempore restored.

Whence, if the Diathesis shall seem almost already reduced, if the affection of
VOL. II. X the

the head or lungs, or of any other inward part, is already removed, and yet we are affraid of the disorder returning, recourse in this case must be had to lenient *debilitants*; venesection and purging are to be preferred to sweating, which the system will bear better than the stimulus of heat, after the Diathesis is abated or removed. Before we introduce this practice a few things must be pointed out concerning the quantity of blood to be drawn off. As in each bleeding, so likewise in the whole quantity of blood to be taken away, there must be a middle degree to that which physicians commonly have followed, thinking that sometimes a very large quantity at one time, at another a very small should be taken; and the more so, because amongst the other remedies mentioned, the cure being more protracted, there is little need of much blood being taken at once. Their age must be examined, as I said before in the commencement of the cure. The manner of living looked into, con-
sideration

sideration must be taken of the quantity of the stimulus lately taken in, and the state of the body must be compared with the magnitude of the symptoms, and the effect of the remedies. Hence judge of venesection, &c. consider what one remedy seems to affect, and what another. In fine, you will see that there is less need of each stimulus, the more largely the others are applied, and you will perceive that the danger of too great venesection is to be avoided, and the disorder to be treated more cautiously.

As to what concerns the method of venesection, it must be made at the largest vein; because when a small one is opened it is not equal to ease the vessels and some disadvantage may attend the cutting of an artery. How to constitute any more certain rule is difficult, it will be for the most part sufficient to know that within three or four days about two pounds of blood being taken with the application of

the ^{other} remedies, in a middle aged person will generally suffice.

Bleeding, as long as any of the sthenic Diathesis remains, must be followed by purging, and the other proposed methods of cure must not be neglected. But purging, which at any time brings on a fit of the gout dissolves a Cynanche Tonsillaris and mild Erysipelas, even attended with an affection of the head, is of manifest detriment in proper *Fevers*, which for the most part is evidently noxious in the *dyspepsy*, asthenia, and all kinds of disorders, consisting in either *direct* or *indirect debility*, and it is a part of that pernicious method of cure, through the whole asthenic form of diseases, which is commonly practised. The more it is to be avoided in these disorders, the more it is to be used in the sthenic ones, nor is it to be omitted in any of the less violent sort, such as those are, in which venesection is necessary, but it is to be used in the manner I mentioned,

tioned, and as I formerly discussed. The diffidence in this remedy when useful, and the confidence in it when noxious, was brought on by the spasmodic doctrine, and is to be above all things avoided, as admitted by a false and foolish principle.

As nothing hitherto has been more common in asthenic disorders, nothing is attended with greater detriment and often with immediate destruction; so, for the same reason nothing is more successful in curing sthenic disorders.

It is scarce credible to tell what a mark the odium of the *Alexipharmic* method of cure has branded the best remedies with, on account of their bad application and of their perverting the proper method of cure. Which method, not to mention other things above related; sweating which whenever the Diathesis is moderate, or when it is not very great, or does not affect a vital part, *i. e.* in all the disorders of this form, except those that are violent

violent in their commencement, of which we are now treating, is of great service, and very efficacious for health, yet has been intirely laid aside as uselefs and noxious in the cure of all these except one, and particularly after the spasmodic doctrine began to be admitted, and gradually to prevail.

But altho' except the rheumatism, which this method at least by one medicine is allowed to remove; if it from a more free or more sparing use most certainly either relives or intirely removes even the Cynanche Tonsillaris, the Erysipelas itself, and the symple synocha; if this be known even to the common people or to well informed physicians; what reason can you bring? What certain and experienced event can you advance? What eloquence are you endowed with, that you think that you can persuade every body that the same, after a most vehement Diathesis much diminished by other remedies, and
already

already reduced to a very small one, to which this is suitable, is not to be applied.

You object that heat, which attends the first operation of sweat, may be noxious; for you dare not say that it is certainly so because you never tried the experiment. Tho' this may be granted in a Diathesis which threatens *indirect debility*. page 197, VOL. I. &c. and page 9, VOL. II. &c. Yet we will not allow that in a moderate one, whether from the beginning or so caused by other powers, and consequently after the method of cure was expounded, that heat will not be compensated by a great profusion of fluid from the whole surface of the body, and that after this part of the vessels is relieved from a heavy stimulus, the diminished *excitement* will be more equal throughout the whole vessels and all the genius nervosum. If the great number of vessels tending towards the intestines, towards the stomach, when emulged so powerfully diminish the Phlogistic Diathesis. (as mentioned in page 167, VOL. II.) How comes

comes it that in the perspiratory vessels a similar evacuation is not proper? To which reasoning if the circumstances just mentioned, be conjoined what have you to say at last against the use of sweating, when heat not greater than necessary, attending its operation can no longer be noxious but may be very useful? Object your certainties, your reasonings. Turn yourself into all shapes possible, you can never find any solid objection against this remedy. But whence all this? Will there never be an end of thus flying from one extreme to another? Will there be no medium found to the *Alexipharmic* cure, but what is also bad or even worse? If physicians during a raging peripneumony, are not affraid to prescribe sweating by the most stimulant medicines, will your method of cure not admit of its application, and that by the most mild ones? If Sydenham, in curing sthenic disorders, prohibited heat, because it certainly increased the *excitement*, is a moderate and salutary degree of it to be avoided

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ed &c. page 43, Vol. II. If you are ignorant that more things, more powerfully diminish the *excitement* than one only. Supposing we pardon you in this ; must we also pardon you, because like an Empiric, you do not see that some things are useful and others the reverse, for which not wit, because we would not require it of you, but only common sense is requisite? If without any predecessors to think and invent something would be too much and not to be expected from you, must not we think out of a thousand that treat on all the parts of medicine, and some in one opinion right, or wrong in another, and some of another opinion, that you have said nothing but continually kept in the paths of one man, that you, I say, are not worthy of admiration.

²
We must not therefore in this part of the intention of cure, after the above-mentioned administration promote sweating; even tho' something should seem
Vol. II. Y wanting

wanting to perfect health, by a little of the sthenic Diathesis remaining, or if sweating comes on spontaneously.

When the symptoms of such sweating are perceived, nothing else is requisite, except to apply woollen to the body, to give warm drink, to avoid cool air, to sweat a sufficient length of time X. hours at least, or even XII. If by this means it flows in a plentiful manner from all parts of the body all medicine will be useless. Which sweating, after it has subsided, in part yet should it not have answered the ends expected, Dover's powder must be administered until the intention of such is fully obtained. Along with which administration, cold water is sometimes added, and the body kept well covered, but the use of warm drink is often found more useful. And as in diseases of this sort, to which this method of cure is applicable, so it should be used in others, when the mediocrity of the Diathesis obtained by the
other

other remedies will admit of it. Thus in the measles, it is often found useful, but it must never be immaturesly used. Should heat be found hurtful it must be laid aside. For we do not prescribe many things in our method of cure, at the same time, and nothing but in order that the *excitement* may be more equally supported throughout the whole system.

In all the cases of a vehement Diathesis whatever has been mentioned, are to be put in practice more or less, and some in a different degree, according as the remaining force of the Diathesis requires an increase or a weaker application, and the whole course of the method of cure is to be enlarged according to circumstances.

Besides these things there are some remedies of less consequence, as acids and nitre, some of an uncertain kind, such as bleeding by leeches, by cupping, and drawing of other fluids, yet they are mentioned; as of moment, particularly the acids, in-

asmuch as they render drink agreeable, and though the lungs are affected, yet they excite not a cough, and as they are cooling, the more they are desired, the more they are to be admitted of. Remember that nitre possesses a less cooling force than what has been thought.

Let us pass on to the other part of the intention of cure, where the Diathesis is more mild, as in the other Phlegmasiæ, and such sthenic affections, and the mild pox and measles, as also the Scarlatina, in which a less force of a *debilitating* power is required, consequently proper practice requires neither all the abovementioned remedies, nor as much of each of them, as in the cure of the more violent sthenic diseases.

In all these cases, the rheumatism not excepted, which arises from a very great Diathesis, venesection is not at all necessary, and if we expect it, a more free use of
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it would be still more noxious in those of a less Diathesis. For where the *excitement* is not very great, on the contrary moderate, and scarce exceeds that degree which creates a predisposition to the more vehement disorders, there under the name of a medicine to use a very *debilitating* power, against a less violent disorder, as it were, would be very wrong; and as venesection, is chiefly used in order to prevent a too great *excitement* passing, on to *indirect debility*, or death. There is no necessity for it here but the reverse.

The lance is not to be used, not only in diseases of *debility*, which are of another form, in most of which it has been, and is the custom, to draw off more or less of the vital fluid, but even in disorders of this form, except the more vehement ones.

In the rheumatism, although the Diathesis be often great, yet the usual quantity
of

of blood is not for this reason to be taken. For as every Diathesis is always found greater, in some one part than in another equal one, so the same is to be said of the sthenic Diathesis, in this disorder, which is greater on the surface than on any other part. The reason is, because heat, the most active noxious power, succeeding cold, or so alternating with it, that the stimulus might be increased by its effect, directs all its peculiar force to the surface of the body. Hence after much bleeding, the disorder often returns more obstinate. The reason of this is very plain, after understanding the principles of this doctrine. Venesection lessens the sthenic Diathesis chiefly in the capillary and perspiratory vessels disposed in the tract of the muscles, the consequences of which are evident. This explication is confirmed by the certain testimony of Physicians often complaining that their delightful remedy is vain, viz. venesection.

For

For which reason sweating, which we spoke of, particularly belongs to the cure of this disorder. To which immediate recourse must be had, the Diathesis becoming vehement, characterized by heat, pains particularly in the night time, and a hard and strong pulse; first taking XII. ounces of blood away, and observing the same plan, I proposed, in point of temperature and victuals. Which sweating that it may the more freely flow from the body, and continue the longer, is to be excited by Dovers powder, and to be kept up for about twelve hours, then abated by degrees till the abating of the symptoms, and if the return of these is found, it is again to be excited in proportion to the same. The remainder of the cure is to be committed to other remedies and particularly to an exact temperature and low diet.

In the simple Synocha, Scarlatina, Cynanche Tonsillaris, Catarrh, Erysipelas and also in the mild pox and measles, Sweating, bleeding and purging, are to be
used,

used, only in proportion to the violence of the Diathesis; (see page 93, &c. Vol. II.) the patient same time using only a spare diet with diluted drinks and keeping up tranquillity of mind as much as possible. The Diathesis is often so mild that the use of one or other of the remedies will be found sufficient. That is very moderate where the horror, languor and heat, are but trifling, particularly in the beginning. The disease may also be judged of from the state of the organs whether voluntary or involuntary. Where the force of the stomach remains sound, it is a proof of moderate *excitement* throughout the system. In a mild disease often a purge of Glauber's salt will be found to remove it, and without this, cold, rest, and abstinence have often brought back the morbid *excitement* to a salutary one, or often without such cold abstinence and rest will reduce such a Diathesis. A thousand times have the Cynanche Tonsillaris the Catarrh, and the simple Synocha, nay even the Erysipelas itself attended with an
inflamm-

inflammation of the face, been thus removed. Nor does the Scarlatina, tho even so violent prove too powerful for this same administration.

During the cure, the proportion between the magnitude of the *excitement* and of the Diathesis is to be particularly attended to, and all other distinction to be laid aside. For as under this sense the simple Synocha has been above distinguished from the phrenetica, the mild Erysipelas from the severe. So it often happens that the Catarrh arises to that height, as to threaten us with, or actually bring on a Perpneumony, and that the latter is much more lenient than usual, In which cases no respect must be had to other distinctions, but the magnitude of the *excitement* alone should be the rule of the Physician.

Another very useful admonition is after having diligently considered the principles, to judge prudently of the state of the pulse and of the temperature. The

pulses in all sthenic disorders are moderately quick; to this is joined hardness and a certain fulness. Whenever therefore they are very quick, we may suspect that the sthenic Diathesis is passed over to the asthenic one, and the too great *excitement* into a contrary state, or that the disorder was asthenic from the beginning. In order to take away this doubt, and ascertain the truth, the noxious *exciting* powers, the habit of the body, and the age must be considered, or whether any contagious matter, was the forerunner or not. Heat of the skin is common and uncertain to these disorders, and *Fevers* of a quite contrary mark; which heat, as it depends on the perspiration being obstructed, both to the sthenic and asthenic diseases, it must be remembered that in the one it depends on *debility*, and in the other on vigour, in order to ascertain with more certainty which of these it arises from; the other symptoms, and the noxious *exciting* powers, are to be attended to. In order to know with more
certainty,

certainty, what this symptom arises from, the other symptoms, and the noxious *exciting* powers, are to be inspected. In fine, the only way to know whether the *excitement* be redundant or deficient (see page 12 and 20 VOL. II) is to be ascertained from the common symptoms; and we must not judge rashly from any peculiar form.

Having compared the above mentioned marks with all the others, and with the Diathesis, prepare for the antisthenic or stimulant method of cure. The more violent sthenic disorders, such as I mentioned first can scarce be mistaken. Which as they are easily discerned from their almost similar, viz. the asthenic, so, if this distinction should seem to any one doubtful let him observe that venesection is to be used not even in sthenic complaints of a mild nature (see page 175 &c. VOL. II.) much less in the asthenic ones, to which a *debilitating* power is so hurtful, and thus from being warned, let him understand that a method reverse to the

noxious powers will be thus free from error and mistake. For if there be a Diathesis, tho' sthenic, yet of a mild nature; an inconsiderate venesection will often throw it into a opposite disease and will always be useless. If on the other hand, a disease should deceive us from a sthenic appearance, and yet during its course should shew itself to be an asthenic one; in this case whatever blood has been taken, will serve only to increase the disorder. Yet this pernicious method of cure is daily practised. Which sends so many to the grave, and is an eternal plague to mankind.

As hunger, cold and purging are sufficient to check the violent Phlogistic state of the small pox, so whenever this method is neglected, and the eruption confined, there this state takes place, and a trial must be made of as many of the remedies mentioned as are necessary. Sweating is but for this reason to be avoided; because the stimulus attending it, by increasing the sthenic Diathesis in the skin, contributes
to

to obstruct the perspirable fluid, to detain the contagious matter under the cuticle, and to increase the pyrexia, hence the symptomatic inflammation commonly called the secondary *Fever*. This intention of cure is taken from the above mentioned symptom, and does not at all contradict the precepts here delivered, (see page 158 to 163, Vol. II.) although sure practice has proved that the above mentioned remedies are sufficient for removing such diseases, yet before the eruption, nothing militates with the practice of venesection, and sweating, which are proper in this, as well as the other sthenic complaints. In fine, as low diet, cold and purging so surely correspond, so the other remedies that destroy the sthenic Diathesis, are proved to have the same effect in this case also. Which we must say is a proof of the consistency of these principles; nor are we to think the small pox different in nature from the other sthenic disorders attended with pyrexia, except in the eruption &c. requiring a determined time to run its course

course together with the cure. (see the history of the small pox)

Whenever, as in the gastritis, enteritis, nephritis, cystitis, hysteritis, hepatitis, (VOL. II. page 123) the sthenic Diathesis, is accidentally conjoined with a pyrexia, which has been excited by the operation of stimulants, of acrids, of compression, &c. or by any of the before mentioned noxious powers, operating on any sensible part only. I say, this Diathesis, because it exasperates the pyrexia, is to be cured by proper remedies, viz. *debilitants* which we have lately pointed out.

Together with these remedies now mentioned, peace, and tranquillity of mind must be observed during every part of the Diathesis as much as possible and that in proportion to the magnitude of the Diathesis, and the more so, if the stimulus of thought and of the affections of a more violent nature, be principal agents in keeping up the disorder.

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In the mania therefore and pervigilium particular attention must be had to this precept. In the ^{former} ~~latter~~ intense study, and commotion of mind, especially at late hours, must be avoided; dull books are to be read when alone, passion, revenge, remembrance of beloved objects, or former cimes (page 140 Vol. II.) must be avoided; and various stimuli, which by their extreme operation, waste the *excitability* and induce sleep, such as exercise, strong drink often taken, but in small quantity, moderate supper and lastly heat are to be used, which bring on *indirect debility*.

This point of so much moment to the confirming this doctrine, is evident from the same remedies being salutary in mania which are so in pervigilium, but in an increased magnitude. Thus it is not peace and tranquillity of mind, both which are here destroyed, but a state contrary to these is induced; hence the disturbance of mind, and the enormous vigour of thought are to be combated,
and

and as a too great force of the mind is a very unhappy state, so fear and terrour must be used ; the insane are to be operated on to despair.

In Obesity avoid animal food and use proper exercise, keeping up a due degree of perspiration, but not so much as to induce *indirect debility* &c. In fact the common method of cure must be put in practice that the too great *excitement* may be reduced to a salutary state.

Consequently less food, which in this is peculiarly noxious must be given, and more exercise undergone. These are generally sufficient for the cure.

The best method of diminishing food is to join vegetable matter to the animal sort. The next is to abstain from the latter and eat more plentifully of the former. The first of these is more proper for those who are predisposed to disorders of *debility* such as the gout, dyspepsy
from

from a long habit of luxury, asthma, epilepsy, and other diseases of the same sort. The latter answers only for those, who are predisposed to sthenic pyrexies, being also vigorous, and in the bloom of life. Yet this is not to be followed in this condition of the system unless for a time, because so great is the force of this power in *debilitating*, that while it is sufficient and even more than equal to the cure of Obesity, especially when accompanied with exercise, yet it is so peculiarly fitted for causing the asthenic Diathesis, and all disorders depending thereon, that too long and liberal a use of it might be dangerous.

The ASTHENIC DIATHESIS.

BEFORE the perturbation of the functions, which only comes on at the very commencement of a violent disease, all the senses are more dull than usual, the voluntary and involuntary motions are performed with more difficulty or are more ~~hardy~~, the acuteness of the mind is less and the sensibility and affections become more languid. That the heart and arteries languish, is evident by the pulse; the extreme vessels on the surface of the body, are also in a state of weakness, as is manifest from paleness and dryness of the skin, and from the diminution of humours and drying up of ulcers, and from the perfect absence of the Phlogistic Diathesis, which may produce symptoms very similar to those of such a Diathesis; imbecillity clearly evinces horror of the muscles, and the want of semen or milk, the defect of internal secretions. The impotence of the
digestive

digestive organs, is manifest from the want or desire for food, from loathing of the same, and from sometimes being thirsty, troubled with sickness, vomiting, weakness of body, and evident want of blood. In this Diathesis, whether as yet consisting in predisposition only, and, not yet arrived at that height which constitutes a disease, the faculties of the mind are also clearly ^{manifested} ~~diminished~~. Thus both our corporeal and mental powers are diminished.

The ASTHENIC DIATHESIS.

Illustrated from the explication of the
SYMPTOMS.

HORROUR is no contrary symptom, of the more greivous asthenic diseases, whenever deficient perspiration, its cause, takes place. The cause of this defect here is, from the weakness of the

whole system, that imbecillity of the heart and arteries, by which they with difficulty propel their fluids to any part, and with more difficulty still, or scarce at all to the extreme vessels. Hence perspiration is suppressed. The same explication may be given of cold, when it is attended with horror.

In asthenic affections the pulses are weak, soft, small, and very quick. This softness, whenever it is perceptible through its smallness, as likewise this smallness arises through want of blood, and this also springs from the deficiency of animal food and too great use of vegetables, or victuals, defective in quantity, whether of one or the other sort during the time of the predisposition.

I say, the cause of the debility and great quickness of the pulse is the defect of food and all the other stimuli, as strong drink, exercise of body and mind, and scarcity of blood.

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Since by degrees the redundant *excitability* can only be worn out, and strength repaired; therefore if at any time the pulses grow fuller and harder sooner than what is natural; and ease is not got in proportion, that is a bad sign; and arises from a too stimulant method of cure being attempted through too violent exercises of body or mind, or too great a use of stimulants, particularly of those that are highly diffusible which will bring on *indirect debility* or an asthenic Diathesis, whether used by people labouring already under *direct debility*, or, otherwise, that is, whether in sound health, in a state of propensity to disease, or in disease itself.

The same defect that induces a paleness of the skin, prevents also perspiration, viz. the *debility* of the heart and arteries. Hence a sufficient quantity of blood is not driven to the surface of the body.

The headach, which is a very frequent symptom of asthenic affections, as also
pain

pain in the joints, which is less frequent, arises from want of blood; for this is the effect of it not distending the vessels; and as a moderate distention, such as is usual in sound health, creates an agreeable one, and whatever is above or below this, produces a disagreeable sensation, therefore pain takes place here. But much less is inflammation to be suspected here to be the cause of the pain, than in a Phlogistic disorder; because not only pain, but even delirium itself, so easily yields to stimulant remedies; which would not be easily done, if so tender and sensible an organ, and so necessary for life, should labour under a grievance so powerful to destroy the texture of the part affected.

Nor can begun delirium be well imputed to inflammation, for the same reason, which on the contrary is to be attributed to a scarcity of blood, and to the defect of other stimuli; nor is this to be doubted; for all stimulant remedies,
 which

which are of little use towards filling the vessels, so happily and so soon destroy all asthenic delirium; and when after the violence of the disease is overcome health is brought back and established, by sufficient nourishment and the operations of the mind restored to a sound state. I say, the effect of those remedies in this case prove the truth of our assertions.

Thirst and heat, which characterize asthenic no less than Phlogistic diseases, nor are they less frequent signs of them, arise from the asthenic Diathesis, operating in the fauces and the whole system; here obstructing perspiration, there the excretions of saliva, exhalable fluids, and mucous matter, on account of the *debility* and relaxation of the extreme vessels. From thence the jaws lubricated with undue humours, burn with thirst. Hence when the perspirable fluid is retained under the skin, heat is accumulated along with it, which is usually, in free perspiration dissipated in the air, in consequence of which
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the system remains almost in the same degree of temperature always. But heat receives little increase from *excitement*, or, as is usually termed, from the principle of life, since it happens both in Phlogistic Diathesis and in *indirect* as well as *direct debility*. But the *debility* of the vessels in the surface of the body, under which the covering of the fauces and that part appropriated for the passage of air, are comprehended, is a part of the consequences of that of the heart and arteries, and this latter also of the whole system.

Thirst is much more frequent and troublesome in asthenic, than in sthenic diseases, and is a more intolerable affection. A loathing of food or want of appetite, are the forerunners of this state and its successors are sickness, vomiting, often acute pain of the stomach, and other various complaints. The explication of which shall be our next business. Want of appetite and loathing of food, depend on the *debility* of the whole system; as all the anti-

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cedent noxious powers which cause that affection, by their *debilitating* power testify; as also by this, that the remedies which act by stimulating and strengthening, check the violence of these affections, as well as cure them. The cause of a good appetite is the strong and sound contraction of the fibres of the same, by which digestion is kept up, as also the action of some fluid, such as the gastric juice, or saliva, for the effect of which a considerable degree of vigour is necessary in the stomach. But in case of *debility*, none of these things can take place; the fibres are not strongly contracted, the vessels do not pour out their extreme fluids, received victuals into the stomach are not digested, when they are expelled by the stomach, but most part of them remains unchanged. Hence food is not desired, nay, in a violent disorder, it is even rejected.

Thus has thirst been explained, and thus must sickness, which, depending on

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the same cause, as a higher affection, be accounted for. For where the powers are vigourous, there is a most agreeable and pleasant sensation, as well over the whole system, as about the stomach, and the parts bordering upon it, but quite the reverse, in those asthenic affections.

As for vomiting, it is more intolerable than all these grievances put together. For such is the *debility* and laxity of the fibres, in this case, such the collection of dirty crudities, together with the corrupted air, in such a state attending the distention of the stomach, that the oppressed fibres are unable to perform their usual motion, commonly called the *Peristaltic*. And as this motion, whether in good or bad health is directed by a stimulus to a contrary part; when the stimulus is from the mouth, it is driven downwards, when from the stomach upwards; so filthiness and air being evolved, of which we spoke operates as a local stimulus, and the motions it excited, tend upwards, which inverted motion can never be agreeable, as
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being contrary to nature ; hence sickness before vomiting. This motion always continues violent for a little time, because the local stimulus excites the muscular fibres into violent and enormous motions ; hence rises vomiting, and other asthenic Symptoms.

Spasm, is the cause of the pain in the stomach, in the intestines or any where else, whether inwardly or externally in an asthenic Diathesis, which is the result of the fibres in the organs of involuntary motion being relaxed and destitute of tone, through the *debility* common to the whole system, along with the distending matter. The offending matter in the stomach, hard fæces in the intestines, or extricated air in both ; is the *fordes*, whose effect in distention does not so much depend on itself, as on the laxity of the fibres, which it distends. For the distending force that oppresses such fibres, is resisted and its distention opposed by powerful ones and those that contain real vigour. But when they are relaxed,

of which sort we are here speaking, the more they are acted on, the more they give way, until after having lost the power of alternate contraction and relaxation they remain immoveably contracted. Which in the former state is a consequence of that property of the muscular fibres with which they contract when under such circumstances, not like common elastic matter after the extending cause is removed, but even if such should continue. During this operation, this air causing the sensible fibres to undergo a certain, degree of violence, hence pain. A proof that more is to be attributed to the laxity of the fibres than to the distending matter in this operation, is the variation of the tone and density by stimulants, for they correspond with the greatest exactness one to another, as depending on the same cause. Whence it comes that contracting themselves in a sound state ; and powerfully acting against one another, when the peristaltic motion is restored, they expel the matter that still remains, and which continues to distend, they

they expel it, I say, by the anus, without any other assistance, as has been lately found out.

Thus wine, spices, volatile alkali, and the preparations of opium, have the power of increasing the 'expulsion' of such like matters, without either vomits or clysters, in a very short time.

Pain, which affects so often the exterior parts of the body in asthenic complaints, depends also on *spasm*, yet not conjoined with distensive matter. In other cases a power, not material, makes exertions, viz. a certain attempt of the will to move the member affected. By this, as well as in the other case, that is, that of the peristaltic motion, which is an involuntary one, beyond doubt, by distention *spasm* is excited, and often with very great pain. Whence, as the effect is the same, viz. *spasm* it is to be attributed to *debility*, and to be removed by the restoration of vigour; the cause therefore must necessarily be the same, and must also be placed

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ed to the same account viz. to *debility* with an effect entirely depending on distention, and having an equal force with it. Thus from known effects we may often safely ascend to unknown ones. Pain, of which we are speaking here, regards the *spasms* of the muscles. But there is another pain less local, more diffused, and equally troublesome which is not caused by *spasm*, but by another local stimulus, equally arising from *debility*, equally increasing it, and attended with the other signs of the same, and hastening on death by further *debilitating*. This arises from a mere acid which sometimes domineers with great *debility* in the alimentary canal, of this chiefly the cholera and all the affections of the primæ, which are attended by vomitings and loosenings, are proofs,

This acid is not the source of the cause, but a symptom coming on when the disease is formed from its cause, *debility*, and arising from thence, with
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the other symptoms become powerful is destroyed by the same remedies. This same, does not cease to increase the *debility*, whether in the *primæ viæ*, or in the rest of the system, proceeding from the peculiar cause of the disease, and extending the force of the same to the whole system, but chiefly in the part where it more immediately resides.

But although the produce of *debility* belongs to the same source as *spasm*, there is no need of any method of cure either to change it or cast it out except the common one. For as it begun, so it continues on to depend on the common cause, and whatever appertains to the cure of the rest of the symptoms, do the same with respect to it. For which, as in the cure of *spasm*, stimulants, not vomits and clysters, nor any other debilitants are requisite. As in a convulsive state the acid above mentioned causes inward pain, in the organs of involuntary motion; so it produces outwardly or in those

those organs whose motions are voluntary, something of the same nature. And as no matter there corresponds to the distention, so none here corresponds to the pain. Moreover as each *spasm* of the muscles represents the spasmodic cause and particularly that in the Tetanus; so each convulsion represents the convulsive cause; and above all others the Epilepsy. In fine reason proves that the external and internal cause is the same, so the same proves that from a known effect to an unknown cause the truth is often discovered.

The simple course arising from a very slight want of food causes this most grievous affection, viz pain, to return to the place we deviated from pain when arising from no defect at all, in point of victuals, &c. but from other sources, causes often a spasmodic or convulsive pain. First for the reasons above mentioned, food is not desired if it tends to *debilitate*, and if it be wanting food, I say, such

such as flesh broths, for example, is held in contempt; secondly, if likewise no stimulants are applied, he becomes thirsty, and cold things the most *debilitating* of all are eagerly desired to quench the thirst, will be preferred and swallowed before all the delicacies besides. Which is succeeded immediately by sickness; and if not relieved by a diffusible stimulus, such as a glass of liquors, immediately proceeds to vomiting, and in which case if one glass is not sufficient a second and third must be given, &c. When the affection is a little more grievous, an acute pain arises in the stomach during vomiting, just as if a dagger was cutting it transversely. And if the affection is still more grievous, by the cause still acting more violently, he suffers all kinds of punishment, his headachs just as if it was struck with a hammer ~~particularly in his head~~. As the disease ^{particularly} which is not immediately communicated to the intestinal canal for the most part, for the stomach is mostly the seat at first, but during

the continuance of the disorder often stools are obtained, attended with great pain and twisting of the guts, but oftener which is less to be wondered at a constipation of the bowels takes place, and the peristaltic motion is inverted, in which case the patient experiences all kinds of punishment or distress, vomiting and belly-ach take place. Under the head of affections just mentioned are comprehended the dyspepsy, gout itself, diarrhea, dysentery, cholera, colic, the worms, consumption both the puerile Atrophies as they call them, and the greatest number of diseases in our time.—During the progress of the disease and by the *debilitating* noxious powers always increasing the ~~disease~~^{symptoms}, the exterior parts of the body are drawn into consent, and the organs of voluntary motion ~~are~~ attacked. Sometimes the legs, then the arms, and other parts are variously distorted by spasms. Sometimes the breast on all sides, sometimes the shoulders, and then the sides, with the back and neck are tortured. But what
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part of the body is exempted from pain, not the region of the loins, liver or stomach; in which, tho' the acute pains that exist in them, and are imputed to inward inflammation, yet they really arise from the spasmodic and convulsive motions. That this is their true origin is confirmed by the use of stimuli, that often puts an end to such disorders either immediately or in a short time, and replaces sound health; it is confirmed also by the unhappy consequences attending the contrary method of cure, which prescribes venesection, different purges and abstinence, by which it returns with more violence again, as abstinence alone is sufficient to create evils, so high living hath been equal to destroy them.—These same pains as they are at one time joined with enormous motion, at another happen without it, so they are intirely foreign from those of inflammation. Which pains therefore ^{might} ~~are~~ to be joined to the concurrence of asthenic symptoms, and are to be distinguished from others that have their

origin from a different source. Both Phlogistic and asthenic Diathesis mark their own peculiar pains. This observation is of great service to the general disorders and intirely overturns the common received methods of cure. The head-ach, that frequent complaint is to be cured by stimulant remedies and by no means to be treated with *debilitants*.

Symptoms of perturbation occur as well in the more greivous asthenic disorders as in the Phlogistic ones. Such the head undergoes in the epilepsy, apoplexy, and *Fevers*; the lungs in the asthma, the alimentary canal in the cholera, colic, dyspepsy and gout. Thus in the alimentary canal besides the pains above mentioned, there are other burning sensations, anguish, contorted, and direful punishments, which are so very terrifying to him that feels the the pain as well as to the standers by and creates a suspicion of inflammation being the cause. Which is very and always has been a difficult thing

thing for those that see such disturbance and tumult; and are young practitioners or ill informed physicians. Which disorders nevertheless, have nothing to do with inflammation, and depend entirely on the the contrary state of the system; which is proved by that so often happy cure by stimulants, whenever put to the trial. Opium and wine when administered are proofs of the same thing, as also other diffusible stimuli, along with these broths of flesh meat and flesh meat itself and at last the usual food and accustomed manner of living with caution not to use debilitants is proper treatment. Which method of cure demonstrates that these affections are free from inflammation, as well as all the parts of a Phlogistic Diathesis. Moreover common Phlogistic inflammation, because it seems to occupy an outward spot is another proof that inflammation is not to be suspected to be the cause in this place.

The asthenic perturbation of the lungs so often tortures us with intolerable and settled pain, that in order to destroy it, no moderation is appointed for venesection, which has not only been useless, but often detrimental and pernicious ; when on the contrary stimulant remedies have always answered. The breath is interrupted to such a degree, and all that attend a proper peripneumony, are so apparent that it is suspected, or rather faithfully believed that an inflammation is present. But if there be any apparent difference between this affection and that of inflammation, that shadow of distinction does not lead us to reject our inflammation, but only brings on a question concerning its seat. But the arguments above mentioned are a sufficient proof that there is no inflammation here at all, at least not as the cause, and that it is a disease of true *debility*. By an Antiphlogistic method of cure the disorder increases, but when a stimulant is

is applied it is diminished or destroyed and that very soon.

Those formidable symptoms of perturbation, which attend the epilepsy, apoplexy, and *Fevers*, such as sleep and stupor are often false; which are called lethargic madness, &c. In the latter is observed the ^{irritating} ~~starting~~ of the tendons, in the former convulsion and a diminution of voluntary motions, which have often been referred to irritation, as the lethargic madness, starting of the tendons, and partly to a plethora or else to mobility joined with it; all these without distinction are owing to that same cause, which comprehends all the asthenic diseases, viz. to *debility*. Which is testified by the *debilitating* noxious powers, which alone bring on these diseases, as also by the remedies, whose whole operation consists in stimulating, which ease and remove these very same diseases. In vain does the plethora put on the mask of an apoplexy,

apoplexy, as if at that time or period of life when the body is near dead and blood less, viz. when the usual food is neither wanted, taken, nor digested, in which case how can more blood be expected than in the most flourishing and strong state. On the contrary when an apoplexy comes on, from a long continuance or too great *excitement* in the way of life, the solids languish, the fluids are defective and their fountain, the blood is weakened, through *indirect debility*. The same *debility* is found in the Epilepsy, the same is the cause of scarcity of blood, only it is oftener attendant on *indirect debility*. *Fevers* may consist in *indirect debility*, as in the confluent small pox, or where drunkenness was the principle cause that excited those *Fevers*; but this is much oftener *direct debility*. And in all the cases laid down the origin of the cause, and end of these symptoms, as that of the other ones, that cause perturbation, is *debility*.—Other arguments may be drawn from the multitude

itude of affections in most sthenic diseases which, tho' they really seem to arise from too great a force of the powers of life, absolutely depend on *debility*, as is evident from their being removed by the application of stimulant powers.

Of SLEEP and VIGILIA.

THE *excitability* of animals is of such a nature that it can neither be redundant nor deficient without injury to the system, redundancy causes *direct*, and deficiency *indirect debility*. Each *exciting* power extended beyond proper bounds causes the latter, and being deficient the former a great force of them, sleep and a deficiency of the same vigilia, provided they are within the bounds suitable for health, which if they exceed, opposite effects are the consequence. Sleep therefore is the effect of our daily actions at first *exciting* more, but less at each succeeding impetus,

yet in such a manner as always to add something, until that state takes place where in *excitement* necessary for *vigilia* no longer exists. Of which our existence is a proof, ~~and~~ this is strengthened by the operations of all the powers which are conducive to bring on sleep. Thus heat not to extremes, or reduced from thence by cold to a stimulant degree, as also food, drink, labour, thought, the exercise of the affections (see page 66, Vol. I.) all reconcile us to sleep, provided they consist within those bounds that bring on *indirect debility*.

On the contrary cold, carried within the limits of sound health, not that extreme degree which is immediately the forerunner of death, abstinence or any matter, that nourishes little, that distends little by its *indirect* stimulus, as small drink, tea, coffee, or water especially after the use of mellow liquors, intermission of accustomed work or exercise whether of body or mind, shame or fear and anguish after disgrace, all bring on *vigilia*, when
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they do not approach that state of *indirect debility* necessary for sleep. Also gluttony, exquisite drunkenness, labour of body or mind, a great force of the affections, and heat relaxing the system are known to drive away sleep, but by stimulating too violently.

As a certain degree of *debility* whether *direct* or *indirect* or partly mixed, is the cause of proper sleep, so too great a degree of it as well as lively *excitement* are its greatest enemies, when they do not approach to that height that borders on *indirect debility*. A person fatigued by his accustomed exercise is composed to sleep, immediately, which flies from one using too little exercise or extreme labour.—Healthy *vigilia* is brought on by that force of the *exciting* powers, which is equally distant from extreme *direct* or *indirect debility*. The morbid sort is generally occasioned by *direct*, seldom by *indirect debility*, and often by a mixture of both. But altho' a certain degree of *direct debility* is peculiarly efficacious in causing *vigilia*, it sel-

dom, nevertheless or scarce ever happens, without some of the *indirect* along with it.—In sthenic disorders the Phlogistic Diathesis accompanied with pain, is a cause of vigilia. When the vigilia continues as long as the *excitement* remains within *indirect debility*. But as the stimulus of pain is not the same as excites the system powerfully indeed, but mildly, yet so acting on the part as to induce *indirect debility*; therefore the latter usually soon puts an end to vigilia and brings on sleep.

In asthenic diseases vigilia is the result oftentimes of *direct debility*, the reason is, the cause of the disorder contains more *debility* in it than that which produces sleep. Thence here whatever stimulates, whatever increases the *excitement* to that point as it were, that induces sleep, is assisted by a stimulant not by a sedative power. In a small degree of *debility* where the *excitement* falls short, only a little of the point necessary for sleep, a very small stimulus is sufficient, such as a
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little portion of animal food, wine, or any other liquor of the same nature, a force of which is always to be applied in proportion to the magnitude of the cause.

Opium possesses no peculiar quality, no virtue, which is not common to it along with all the other powers. In a case of great *debility*, as in *Fevers*, in a vehement fit of the gout, disturbing the inward parts, with great pain, and other asthenic complaints of the same nature, as languor, when sleep cannot be had through the violence of the disease, after vigilia of many days standing, opium often brings on sound sleep. In which case, because the *excitability* is redundant, and therefore can bear but very little force of a stimulus (page 7, 8, 9, Vol. II.) Therefore we must begin by a very little one and proceed by degrees to more, until we arrive at the point wished for.

In asthenic diseases and those arising from *indirect debility*, when sleep also is fled; to bring this back as well as to re-
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move the disease, and restore health, other stimulants are to be used as remedies, according to the magnitude of the *debility*, and diffusibles, if it be very great.

These are the times and these the conditions of the body where opium is to be used for inducing sleep. In all the other situations whether of sound or morbid health it assists the actions as well of the body as of the mind, amongst other effects it dissipates sleep and induces a lively state. Thus if any one falls asleep without a manifest cause, opium renders him wonderfully alert and watchful, it dissipates sadness, produces confidence, turns fear into boldness, gives eloquence to the silent, and bravery to cowards. Nobody in despair, and wearied of life ever killed or will kill himself if he takes an opiate, in proper quantity.* In a word through all the mediate degrees as it were of *exctiement*, opium by far is the most powerful stimulant of all the other

other powers, and thus in a Phlogistic Diathesis it is the most pernicious; because being added to the system in this state, it not only disposes to sleep but it is in danger of bringing suddenly on those disorders from a Phlogistic state to *indirect debility*, and that unto death.

Besides the causes of sleep just mentioned there are others, where a propensity to it is morbid; as in the coma, which usually happens in *Fevers*, and in sleep to those that are feeble and weak. Of which the coma vigilie, is accounted the less dangerous. The cause is manifest. For if morbid vigilie be a sign of a greater *debility* than that which constitutes sleep, it is necessary that drowsiness or a coma should for that reason consist in a less degree of it. A proof that the coma possesses less *debility* than vigilie, is, that the former is less dangerous and easier to be removed than the latter. Of which nevertheless, when it continues a long time, or brings on profound sleep,

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we must take care least it proves noxious by *debilitating* in another manner. In which case we must have recourse to the forms of wine and opium, that the *excitement* may be brought to a proper magnitude.

In the *gout*, *dyspepsia*, and cholic and most of the asthenic disorders that disturb the alimentary canal particularly, which effect those that are worn out with child-bearing and giving suck; sleep is often morbid and much of it of no service.—The same is the case with those that by drunkenness and luxury fall into *indirect debility*. That this depends either on *direct* or *indirect debility* is evident, because whatever *debilitates*, increases the disorder, and whatever *invigorates* removes the the same. Did time permit other arguments might be brought to support this doctrine from the nature and treatment of diseases both of the sthenic and asthenic form.

The ASTHENIC DISORDERS.

THE form of disorders, which may be properly called asthenic, to distinguish it from the other one called sthenic, is a state of the living system, in which all the functions are more or less impaired often disturbed, and always almost some one is more manifestly affected. In explaining which that order will best serve by which we may gradually pass from the least to the greatest, through all the intermediate degrees, as it were, of *debility*.

There are a great variety of symptoms which, being of no import here are not made use of, to distinguish the series of disorders. Consequently, that what we have to say may appear the more certain, if not very exact, we will begin by enumerating the principal ones.

The asthenic disorders are, leanness, inquietude, madness scabby eruption, the asthenic scarlatina, the mild diabetes,

rickets, hæmorrhæa, such as the menorrhæa, epistaxis, the piles, also an apparent contrary state to these; viz. a cessation, retention and suppression of menstruation, also thirst, vomiting, indigestion, diarrhæa, colicanodyne; puerile affections also, as the worms, tabes, mild dysentery, cholera, the angina, scurvy, mild hysteria, rheumatism, the asthenic cough, cystitis, the gout of the strong, the asthma, spasm, anasarca, dyspepsia, severe hysteria, the gout of the weak, hypochondriasis, dropsy, pertussis, epilepsy, palsy, trismus, apoplexy, tetanus, *Fevers* as the quartan, tertian, and quotidian, the severe dysentery and cholera, the synochus, simple typhus, cynanche gangrenosa, the confluent pox, the pestilential typhus, the plague, and death the greatest of all.—This series of asthenic disorders is so to be understood that those which for the most part are mild, and those generally severe dispute sometimes which are more violent *e g.* The gout of the weak, the pestilential typhus,

typhus, or the plague itself, sometimes proceed with the greatest mildness.

The local affections often attending these disorders, such as ulcers, tumours, increased excretions, great discharges of blood and inflammations, are marks of a certain *debility*, which notwithstanding might happen without such.

Hence because in this series the force of *debility* is what is principally attended to, with disorders which are accompanied with those affections are often joined others not attended with any such, as the hysteric and *spasmodic* ones; and to those diseases are often joined the dropsy; Without attending to the symptoms, therefore we must chiefly have in view the magnitude of *debility*, nor is the removing the diseased state of any particular part what we are chiefly to attend to, but that of the whole system.

Of LOCAL DISEASES,

LOCAL diseases, by the order of nature are divided into five parts, of which the first belongs to organic disease, where there is no general affection of the system, none except in the part first affected. Which injury happens seldom but to the parts as they are called less sensible, or more free from *excitability*.

The second part of organic or local diseases takes place either in internal or external parts, which possess a great degree of sensibility, in which case the affection of the local injury is communicated to the whole system, here many symptoms occur similar to these, which are peculiar to general diseases.

The third consists in those diseases depending on increased or diminished *excitement* which arrive at that magnitude, that the parts being no longer *exciteable*,
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can be acted upon by no remedies, so as to remove such a state.

The fourth part belongs to those diseases wherein contagion externally applied to the body is diffused thro' the whole.

The fifth part of local diseases arises from poison applied and diffused thro' all the vessels. The consequence of which is a morbid state of parts more distant, by which the system becomes so remarkably affected.

As to what belongs to the first of local diseases of the organs, the injuries which cause them are such powers, as act by dividing the organ by destroying its continuity by gnawing or eroding, by poisoning or otherwise injuring the part, or by contusion, compression, or distention of the nerves so as to destroy continuity.

The noxious powers are whatever cuts, whatever pricks, or whatever by the force of instruments of war is driven deep into
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the body, acrid substances and poison destroy the continuity in a different manner.

When the injury received is inconsiderable nothing more is necessary than the seclusion of air and cold, and the avoiding any irritating matter.

When the surface therefore is injured in its texture, either by cutting or by the poisonous stings of animalcules, or by any kind of acrimony, or by fire applied to any part of the body; dressings that are light, mild, and oily are sufficient. The division of the Phlegmasia into phlegmon and erythema is nugatory, and misleading from the knowledge of the truth, as well in the cause, as method of cure. For altho' the cause, as they say, being removed, they differ in place, and in like manner in appearance; Inasmuch as the seclusion of air and other stimuli is effectual for the cure, it follows that the nature of all must be the same.

In contusion, compression, and distortion of the nerves, the remedies are mostly the same, there is need of rest here, and tepid fomentations. In all this part of the affections, a certain force of nature acts for the cure here as in universal diseases (see page 66 VOL. I.) this is the *Vis medicatrix naturæ*, so much famed by physicians, but in this case there is nothing happens contrary to what does in the cure of general diseases, for if proper remedies are applied, a cure takes place in both. If a proper method of cure is neglected, the solution of continuity degenerates into a worse affection and often afterwards into a gangrene or death of a part. Therefore nothing else happens here than what does in general diseases. *Excitability* or the property of life, whereby the actions are affected, whenever life is destroyed in the part, and in the whole body, when the external powers acting on the *excitability*, being roused by these powers, as well in the
parts

parts affected, as in the whole system, directs the state of the simple solids.

As to what belongs to the solution of continuity, all the solids whether living or dead have a common property of cohesion, and coalescing one with another. With respect to the second part of local diseases, these have been by a mistake held for universal ones on account of the confusion of the whole system arising from the affection of the part. The particular symptoms are heat and thirst, both of which are increased on taking esculent things, and by all kinds of drink, and whatever is taken into the stomach, attended by anxiety, hiccups a desire of vomiting or a sudden throwing up of whatever is taken in, the pulses in a short time becoming weak, soon quick, and rather hardish. The exciting powers are violent stimulants, or such as destroy the continuity that act by cutting, or by pricking, or acrid substances that by erosion, such as the bones of fishes, powdered glass, cayenne pepper and the like.

The

The ENTERITIS.

THE Enteritis is a local affection in which the abdomen is acutely pained and distended, and in which the whole umbilical region is as if it were twisted; attended with vomiting, bound belly, and a pulse similar to that in the gastritis.

The acute pain of the abdomen depends on inflammation, the distention of the same and the compression of the bowels are the consequence of retained fæces. The same is the cause of vomiting, by the *peristaltic* motion, being prevented from proceeding downwards, the usual way. Inflammation causes the pain around the umbilicus, because the greatest part of the intestines which are affected with the disease are comprehended in that region.

The diagnostics are the same as in the gastritis; except that in this, sometimes on account of the torpor of the *peristaltic*

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motion, the seeds of fruits, hairs or other foreign matters, adhere to the sides of the intestines which through irritation bring on inflammation; this circumstance if well attended to does not contradict what is laid down respecting the diagnosis.—The cure is altogether the same as in the gastritis.

All the other plegmasiæ marked by this title, such as the splenitis, hepatitis, the real nephritis, the cystitis without a stone, the hysteritis not arising from a scirrhus tumour, and the peritonitis, do not belong to this part at all, as being diseases that if ever they be the consequence of inflammation, do not arise from the above stimulants or acrid substances, neither of which can pass to the inclosed *viscera*, for they are either not carried along by the vessels or can they be so carried, but they proceed from the relicts of other diseases of which I shall speak hereafter, with the following exception.

The

The exception arises from injuries received, by whatever sudden means whether they are the consequence of wounds from sharp instruments or contusion.

Should the liver be wounded, the Hepatitis will be evident from a pain of the right hypochondrium, frequently attended with vomiting.

The Splenitis is known by the affection being in the left hypochondrium.

A real Nephritis as they call it, is known by a pain in the kidneys, attended with vomiting and stupor of the legs.

A Cystitis by a swelling and pain in the region of the bladder.

A flux of blood attended with inflammation, such as happens in the hysteritis, from violent labour, in abortion, or in the wound of any interior part, is easily discerned by the pain of the part affected, and by the accident preceding,

HYSTERITIS.

THE Hysteritis is attended with a burning pain, and tension of the hypogastrium together with vomiting.

The noxious powers exciting the hysteritis all amount to violence offered the uterus, thus at the time of birth improper means being used, the delivery forced by ignorance, or by a premature extraction, very often the continuity of the uterus is destroyed.

And as often a great deal of blood is thus lost, and a weakness of the whole body follows the local affection, therefore, not as is usually done, is blood to be taken artificially, and purging used, but all kinds of it must be avoided, and proper food given the woman, but first the part affected must be attended to, the body must be placed in a horizontal position, and rest obtained, rich broths and wine must be given, solid animal food is to be eaten by bits, but often,
and

and the vulva is to be washed with cold water. And if by chance, the *debility* becomes greater, recourse must be had to wine in larger quantity, and drink stronger than this, with opiates are to be used. The use of which is not to be neglected, not even during the commencement of the disease.

ABORTION.

IN Abortion, the back, the loins, and the belly, like women in labour, are pained, the menstrea are universally discharged, and blood inordinately flows from the vagina.

The exciting powers are immoderate exercise, falls, false steps, great exertion in running, going up heights or down: Nevertheless the disease seldom happens except to people indisposed before hand, it is often the consequence of some weakness
left

left after a former abortion which mostly increases in proportion to their number.

The mode of prevention is to guard against all the exciting noxious powers, if walking be too fatiguing, it is proper to ride on horse back or in a carriage, from the third month of pregnancy till the seventh is over, to strengthen the body and to inculcate the greatest tranquillity of mind.

The intention of cure is to preserve a horizontal position with the hips raised higher than the head, to study rest, both of body and mind, to repair the loss of blood, with broths and wine, and to strengthen the vessels particularly with opiates, that their pores may be the more contracted, and thus to remove atony and laxity, which are the chief causes of the profluvia.

DIFFICULT LABOUR.

IN Difficult Labour, which for the most part arises from weakness, and always if it continues long, increases the *debility*, the woman is to be kept up with wine and opium, in proportion to the weakness.

When any part of the womb is injured by the above mentioned noxious powers, and the foetus is brought forth along with the placenta, the woman must be placed in bed as in an abortion, she must be strengthened with broths, flesh of tender fowl, wine and the higher stimuli, the contraries must be avoided, and the healing of the wound may in time be expected.

CONCERNING *Deeper* WOUNDS.

WHERE an extraneous body as a bullet, if that be the cause is taken out, or even if it remains within a place
not

not mortal, first the whole body is highly irritated, is warm, pained and tossed about, the pulses are strong, full, and more frequent than in health, which arise from this cause, that the local stimulus either of the bullet, or of the inflammation succeeding the wound, continually irritating the seat of sensibility affects the whole system.

In this case, because a Phlogistic Diathesis on account of the irritation of the wound is commonly supposed to arise all over the body, consequently the antiphlogistic method of cure is always used thro' the course of the disease, and the use of opium, which is conjoined with the Antiphlogistic remedies is taken only to allay and obtund the pain, and consequently thro' fear of *Fevers*, a great deal of blood is discharged by art, the belly purged, aliment denied, abstinence inculcated, whence death oftener proceeds than health.

All this reasoning is false, as is demonstrated by the principles of this doctrine,
and

and by the bad success attending this method of cure. In a person who has lost much blood, a redundancy of it cannot be the cause of a sthenic Diathesis. Neither can any more probable account be given why the serous fluids should be taken away, or that new ones should not be produced by nourishing diet. A quickness of the pulse, is a foolish argument, to prove an abundance of blood and too great vigour, or if any irritation, that it might require an Antisthenic cure; for unless at the same time that the pulse is hard, it is full and strong, the quickness depends on *debility* and a scarcity of blood, as we have often before demonstrated. Since, in fine, the sthenic Diathesis depends on the common sthenic noxious powers; since the violence of the pain, from a local affection, and particularly from an inflammation, does not tend to increase this Diathesis, but debilitate. (see page 222 VOL, II.) This is another reason, why the habit should be thought to remain either the same as it was before

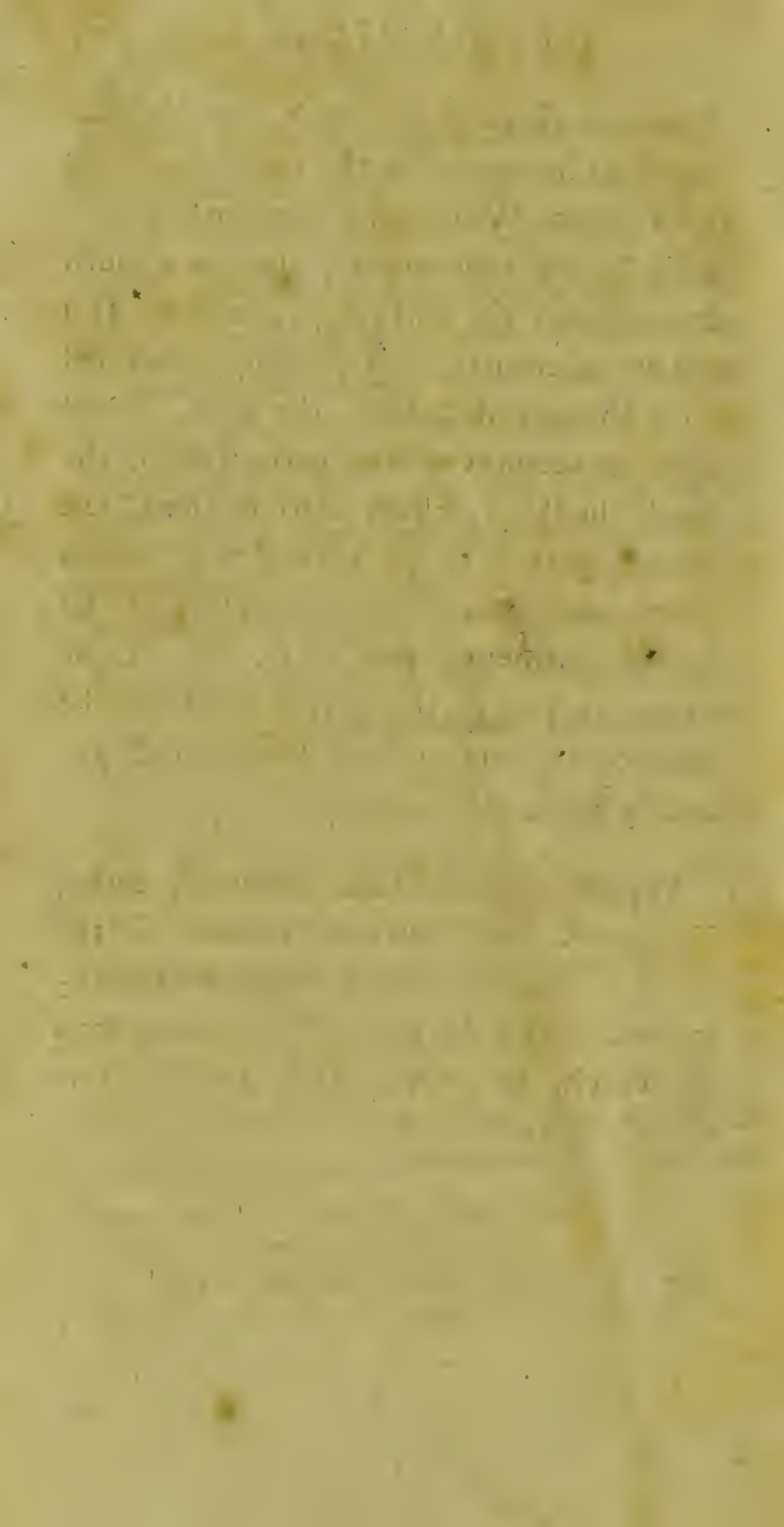
the wound, or to degenerate into an asthenic one. Lastly, the true explication of the difference between an irritation and a sthenic Diathesis, is a confirmation of the same thing. Since the sthenic Diathesis is that state of the body, which is caused by all the stimulants in common, and the fullness of the vessels, which, have the same effect, and which is cured by *debilitants* in general, and attenuating remedies. On the contrary, irritation is that, in which, for want of proper stimulants the whole system is weakened; often a local stimulus, such as a distention exciting spasm, or a mere acid causing convulsion or the pain of a wound, bringing on this general commotion, causes enormous motion in a weak system; but, whether the *debility* be void of a stimulus, or excited by it, there is never need of *debilitants* and attenuating remedies, but often of moderate stimulants; and the only thing to be taken care of, is, lest the method of treatment should cause a sthenic Diathesis, and thus an *Idiopathic* disorder would be joined

joined to a local one, which would certainly be exasperated by it. As therefore under the apprehension of approaching *Fever*, and to allay the disturbance arising from thence, the Antisthenic cure is not to be applied, which on the contrary serves to increase the *Fever* and stir up that disturbance; so neither is the stimulant method to be tried, unless the wound be already closed, or the disorder is great, and a deal of *debility* is already come on from the continuance of the pain, lest the blood be hurried more rapidly than the case will bear, and with a more increased motion thro' the vessels. For neither Diathesis is understood to be present, and only a commotion of the system depending on a local affection, consequently there is no need of either remedies. During the first days of this disorder, because the patient undergoes no longer any gestation or exercise, or the other operations of the body or mind, as he usually does, consequently less food and support is required, therefore something

must be so subtracted from the ordinary stimuli, as whatever is applied, may correspond to the present condition of the patient, and with the state of the wound just now mentioned (page 230 VOL. II.) Therefore least the impetus in the vessels should be too great, the patient must be kept quiet, put in an easy position and cautiously moved, and make urine without being raised. For food, broths are rather to be taken than solid flesh meat, the wound must be often examined and light, and bland dressings made use of. And if, during the time of the dressing, the spirits should sink, cordials are to be administered. After some days, more or less, according to the strength of the patient, should the habit run on to *debility*, through the magnitude or continuance of the pain, besides the broths allowed of before, flesh meat; as rich and tender as possible must be given, and wine often, but sparingly, recourse must also be had to opium, which is usually given at the beginning, and to other more diffusible stimuli

stimuli if there be any such, and the disease is to be treated in the same manner as the Typhus. When any tender parts are injured by any rude matter, such as a thorn driven under the nail (page 222 VOL. II.) and an inflammation is seemingly diffused through the system from the part injured then on account of the part affected, the whole body is drawn into consent, the injured part is to be bathed with warm water, and covered with lint and soft and gentle ointment; and while the disease seems to spread, the person must also be kept quiet, and nothing further will generally be found necessary.

Suppuration, Pustula, Anthrax, Bubo, Gangrene, and Sphacelus, are all the result of general diseases, degenerating into local ones; the method of treating each of which, is evident from the doctrine already delivered.



ERRATA. Vol. I.

T Y P O G R A P H I C A G R A V I O R A.

P. 15. l. 9. for *on* read *an*. P. 11. for *fold* read *solid*.
P. 18. l. 11. for *affect* read *effect*. P. 51 l. 6. for *evey*
read *every*. P. 77. l. 18. for *indirect* read *direct*. P. 82.
l. 8. after *higher* read *or lower*. l. 15. dele *or a clammy*
sweat. l. 19. after *latter* read *it takes place*. P. 94. l. 4.
dele *the*. P. 103. l. 8. for *elemimated* read *eliminated*. P.
136. last l. for *indication* read *operation*. P. 138. l. 3.
after *disease* read *can be thus accounted for*. P. 143. l.
14. for *these* read *this*. P. 155. l. 10. for *is* read *are*.
P. 163 l. 18. dele *in*. P. 172. l. 11. after *yourself* read
it. P. 179. l. 3. after *which* read *it*. Join the lower
break in reading. P. 181. last l. after *condemn* read *is*.
P. 190. l. 3. &c, dele *in fine*.

ERRATA. Vol. II.

P. 30. l. 14. for *the* read *proper*. P. 35. l. 5. for *of*
read *to*. P. 57. l. 2. for *with* read *of*. P. 69. l. 10. for
excites read *exerts*. P. 70. l. 4. after *whatsoever* read
case. l. 5. for *offended* read *injured*. l. 8. for *some* read
same. P. 74. l. 15. dele *tho'*. P. 85. l. 17. &c for *mistaste*
read *mistake*. P. 86. l. 6. after *wanting* read *here*. P.
87. l. 21. for *a* read *an*. P. 91. l. 20. after *either* read
of. P. 92. l. 4. for *emerging* read *arising*. P. 93. l. 9.
for *corrobrates* read *corroborates*. P. 94. l. 23. after *thus*
read *in*. P. 95. dele *while*. P. 97 l. 18. dele *and*.
l. 20. dele *which*. P. 99. for *phrenetica* read *phrenitica*.
P. 102. l. 4. dele *or*. l. 5. add *s* to *take*. P. 109. l.
15. for *as* read *is*. l. 16. after *be* add *so*. P. 114. l. 3.
dele *ing* add *s*. l. 13. for *possesses* read *possess*. P. 117.
l. 3. for *hurtful* read *hereafter*. P. 118. l. 17. for *that*
read

ERRATA. Vol. II.

read *or*. P. 119. l. 6, for *turned* read *tumid*. l. 13, for *expressed* read *exposed*. l. 16 in *admits* dele s. . l. 10. for *sometime* read *sometimes*. l. 18. for *generall*, read *general*. P. 122. l. 2. after *doubt* read *Of*. l. 4. after *self* dele . for *from* read *Form*. l. 13. for *affect* read *effect*. P. 124. l. 14. after *powers*, read *are*. P. 132. l. 5. after *constitute* read *it*. l. 15. after *afterwards* dele . for *What* read *which* P. 153. l. 5. after *number* dele *except*, &c. l. 16. for *particularly* read *especially*. P. 135. l. 3. add *h* before *as*. P. 137. l. 10. for *these* read *there*. P. 138. l. 5. after *that*, read *thot*. P. 142. l. 14. for *evils* read *diseases*. l. 16. to *part* add s. l. 18. after *as for it* read *truth*. l. 19. after *invariable* dele . add, &c. P. 146. l. 2. for *sum* read *same*. P. 147. dele *last* . add *it is evident*. P. 154. l. 5. dele *of*. P. 166. l. 1. after *the* add *other*. P. 171. l. 20, for *We must*. read *Must we* P. 185. l. 3. for *latter* read *former*. P. 188. l. 7. for *hardy* read *tardy*. P. 189. l. 10. for *diminished* read *weakened*. P. 196 l. 21. for *excited* read *excites*. P. 197. transpose from 16th to 21st. l.* P. 203. after *just* add *as*. l. 21. &c. dele *particularly in his head*, after *disease* read *particularly*. P. 204. l. 17. for *disease* read *same*. l. 20. dele *are*. P. 205. l. 23. after *therefore* add *ought* P. 209. l. 8. for *startling* read *twitching*. P. 212. after *proof* dele , add . &c.

* Or understand, that extricated air, *fordes* or hard *feces*, are the offending matters.







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